The National Future Farmer

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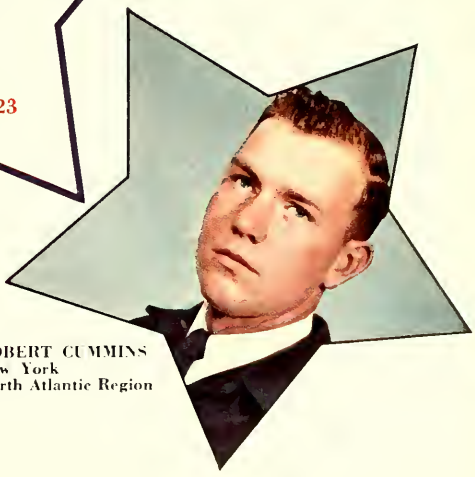
STANLEY AMUNDSON
North Dakota
Central Region

1963 Regional Star Farmers of America

See story page 22-23

JON FORD
Oklahoma
Southern Region



ROBERT CUMMINS
New York
North Atlantic Region

October-November, 1963

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Call your local Firestone Dealer or Store . . . and prove it to yourself. You know what you're getting when you buy Firestone.

**Per replacement tire.*

LaMAR PLANK, MONOOVI, WIS.—"Traction is excellent, even in muddy lots and cattle yards. Field & Road tires come up clean. No signs of road wear."

E. L. PARKER, JR., PERRINE, FLA.—"Traction and wear excellent, even in this coral-filled soil. They give much longer wear on the road, too."

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OUR COVER—These four Future Farmers were recently named FFA's Regional Star Farmers. They were selected from the 385 candidates for the American Farmer Degree this year. One will shine brightest at the 36th National Convention when he becomes Star Farmer of America.

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Barn-door thinking

Good place to stop and think once in awhile—an open barn door. Gives you a new perspective. You can take a deep breath, look up at the sky, and think about how your efforts inside the barn relate to the outside world.

We do a lot of barn-door thinking at the Danforth Farm Youth Center, where we feed and fit lambs, hogs, steers and dairy heifers for both production and show ring. As we test experimental rations, and weigh and judge the livestock, we keep glancing out the barn door at changes in show ring standards, and at what kind of meat and milk housewives are buying.

Maybe that's another reason why 3,614 young folks visited this youth center last year, and why thousands more look to Purina for leadership and help in their project work.

PURINA

Ralston Purina Company, Checkerboard Square, St. Louis 2, Mo.

On America's leading farms

Myers

PUMPS and POWER SPRAYERS

help the farmer produce more . . . and live better

For over 90 years, Myers products have helped farmers increase productivity and reduce operating costs. This is a contribution of which The F. E. Myers & Bro. Co. is proud.

The company works regularly with county agents, Vo-Ag teachers and other persons interested in gaining new information about better farming methods. Myers' field representatives are available for technical assistance.

Myers' field representatives cooperate in educational training on farm spraying and water supplies.

For information or free literature on:
- Pumps and Water Systems
- Water Conditioning
- Farm Spraying

write to the Educational Services Department.

Myers

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ASHLAND, OHIO KITCHENER, ONTARIO
SUBSIDIARY OF THE McNEIL MACHINE & ENGINEERING CO.

Looking Ahead

ELECTRIFIED INSECT KILLER

Farms in North Carolina are now using a machine that electrically charges insecticides for use on field crops. As a result, the amount of insecticide used is reduced from four to 10 times, and the insect kill is even better. Under development for 10 years, the machine puts insecticide through an ion chamber, charges it, then distributes it in a normal manner. The charged particles are attracted to plant leaves like iron to a magnet. Complete coverage is assured and waste is almost a thing of the past.

TEST SEED BY MACHINE

It won't be long before seed technicians will be able to examine and separate seed samples without touching them in the laboratory. Four experimental machines developed at Oregon State University permit workers to examine seeds through a special microscope while protected from dust and fumes; then the machines separate the seeds on the basis of size, shape, and density. All seed testing was previously done by hand, researchers report, making the new machines a major breakthrough in mechanizing the seed industry.

ANIMAL MEAT TESTER

Livestock breeders will soon be able to get the same beef carcass information from live animals in two minutes that now takes up to 30 months. A testing instrument, called a K-40 counter, has been built at the University of Illinois to measure natural radioactive potassium in the live animal. Since muscle contains more potassium than other parts of the animal, the device could help breeders select foundation animals with a higher proportion of lean meat. The present process is now time-consuming and requires slaughtering the animal before the analysis can be made.

INSTANT BEANS AND SWEET POTATOES

Instant sweet potato flakes and bean powder may soon be on your grocer's shelves, a New Mexico marketing specialist reports. The new foods will help boost two commodities that are presently on the USDA's plentiful list, as well as give the housewife two new convenience foods. The bean powder not only provides instant soup when stirred into hot water, but can be made into "refried" beans, croquettes, and casseroles. The sweet potato flakes need only water to become edible.

SOLAR ROOF DRIES CROPS

A new roof design using ordinary steel sheeting has been designed to dry hay, grain, and corn using the rays of the sun. A "sandwich roof" with steel sheeting on both sides collects air from the open ends, holds it until it is warmed by the sun, and then lets it go through a fan into ducts to the building below. The air temperature is raised from 15 to 25 degrees. Drying time is reduced 50 percent, and one farmer reportedly dried 200 tons of hay in four days.

RADIO WAVES HELP SPROUTING

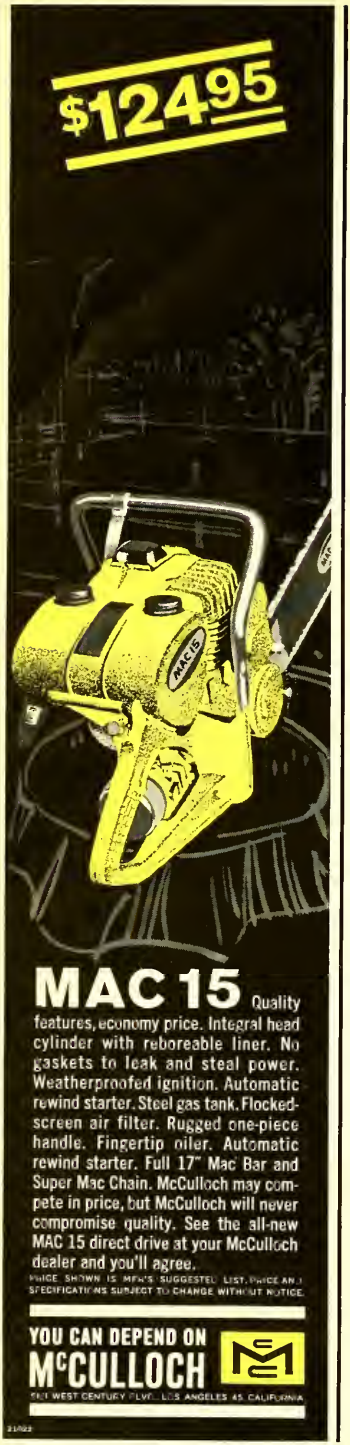
Scientists from the New England Institute for Medical Research have successfully used radio frequency waves to induce sprouting of gladiolus bulbs. Dormancy can be broken after only 10 to 15 minutes, where it normally took several weeks to a month in cold storage. Sprouting is brought about quickly and growth is vigorous, the researchers report. The new method represents a sizable saving in time and expense.

MACHINE SELECTS RIPE LETTUCE

A mechanical device that can detect lettuce heads ready for harvest as efficiently as a man may soon be a reality. So says a University of Arizona engineer after extensive experimenting. Research showed that a device that would select or reject heads of lettuce in the field on the basis of head thickness would be most reliable. Work is also being done on a mechanical cutter so delicately timed that it will cut the very head selected by the first machine. Both may be operating before another harvest season.

New—a motor oil from Texaco! Stops waste...stops engines from wasting money in fuel, wear, and repairs

New Havoline stops waste best because it stops deposits best. Texaco proved it in hundreds of hours of rugged tests against 4 other leading motor oils. Results showed that, with new Havoline, harmful deposits can't form to cause waste. Deposits steal fuel and power . . . cause excessive wear . . . put an engine out of the running long before its proper time. New Havoline is especially kind to engines doing the grueling day-after-day work on the farm. Start using new Havoline—stop needless waste. And keep your engines working efficiently, dependably, for a longer, more active life. Use new Havoline regularly — on the farm and in your car and truck. Order from your Texaco man . . . *trust the man who wears the star.*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MAC 15 Quality features, economy price. Integral head cylinder with reboreable liner. No gaskets to leak and steal power. Weatherproofed ignition. Automatic rewind starter. Steel gas tank. Flocked-screen air filter. Rugged one-piece handle. Fingertip oiler. Automatic rewind starter. Full 17" Mac Bar and Super Mac Chain. McCulloch may compete in price, but McCulloch will never compromise quality. See the all-new MAC 15 direct drive at your McCulloch dealer and you'll agree.
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Your Editors Say...

ONE OF the 12 Aims and Purposes of the FFA is "To encourage improvement in scholarship." This may sound a bit formal, but scholarship has to do with the qualities of learning. In school, the qualities of learning are most often reflected in the grades you make.

You are not a "square" if you make good grades. The ideal student is one who has the talent and initiative to combine good grades and an active extracurricular life. Usually such a person is popular with both the students and adults as well. More important, it reflects his ability to succeed in life.

Before you know it, you will be on your own—making your own living. It will be a big help to you later to think about it now, while you are still in school.

As a Future Farmer, you probably have already made a tentative career choice. You made this step when you elected to study vocational agriculture and join the FFA. You are building a foundation which will lead you into farming or one of the off-farm agricultural occupations. In either case, your chances of success are multiplied many times if you learn to work efficiently and effectively while in school. Many would-be leaders never have the opportunity to realize their full potential because they did not prepare themselves adequately in school.

The school dropout is just one example. The United States Office of Education places the current dropout rate at 32 percent. President Kennedy said in his State of the Union message than an estimated four out of every 10 students now in the fifth grade will not even finish high school. Yet it has been estimated that 70 percent had the ability to finish high school and probably the ability to go to college.

But even if you finish high school, getting into college may not be easy. You will probably find that it depends on how well you did in high school. College admission officers have reported that 61.5 percent of those who are turned down by colleges are denied entrance because the applicant ranked low in his high school graduating class. Perhaps more disturbing is the fact that most of those rejected could have placed in the upper part of their class had they taken their high school work seriously.

In all walks of life today, there is a premium on the man with the best education—one trained for the work he is undertaking. Numerous studies have been made that show your level of earning during your lifetime will depend on your level of learning.

While the school year is just getting under way is a good time to do some serious planning. At least make a tentative career choice if you have not already done so. You can change it later if you wish. Talk with your FFA advisor, parents, and others whom you admire and respect. Then plan your educational objective to help you realize your ambition.

The earlier you start, the better. Proper study habits and training in the right courses are not something that you can acquire in the last semester before graduation.

Wilson Carnes, **Editor**

H. D. Lee Co., Inc., Kansas City 41, Mo.

LEE'S MASTER TAILOR TESTS THE FIT OF HIS FAMOUS TAPERED SLACKS

(he makes them really narrow with just enough room for nourishment)

This is a great example of why Leesures are the kind of slacks they are: a combination of stubborn old-fashioned tailoring with modern new-fashion-thinking from Lee's Student Styling Board. You want narrow hip-hugging slacks . . . great. Lee gives them to you. But Lee's hard-headed old-fashioned expert is going to stick to his guns on the tailoring. You may not pay much attention to seams and stitches and fussy little details. But that's what make Leesures fit the way they do. And wear better. Look better. Twills, polished cottons and textured weaves. All Sanforized Plus for Wash and Wear-ability. A wide assortment of classic and continental styles in a full range of colors including Sand Beige, Bone, Sea Foam, Norse Blue, Mystic Blue, Elephant Brown, Loden, and Black. From $4.95. **Leesures® by Lee**

YOUR NATIONAL FFA ORGANIZATION

at work in Washington, D. C.

Business meetings and policy sessions gave your national FFA officials a busy week this July.

THE FOURTH week of July marked a busy time in the business affairs of the FFA as members of the Board of Directors, Trustees and Donors to the FFA Foundation, and the national officers met in Washington, D. C. The series of meetings started on Monday, July 22, with a business session of the FFA Board of Student Officers.

Also meeting that first day was the Board of Trustees of the FFA Foundation. They were busy planning the budget for 1964, reviewing possible improvements in Foundation awards, and the upcoming Donor's Day program later in the week. That evening the 15-member Board of Trustees, along with the national officers and invited guests, went to the FFA Building to join the staffs of the Magazine and Supply Service in an informal picnic.

On Tuesday, the national officers and Trustees met again in separate sessions. The FFA Foundation budget for 1964 was presented by National Treasurer J. M. Campbell and approved by the Trustees. It provides for $155,750 in awards to Future Farmers over the course of next year. Additional expenses for travel and NFA activities brought the total operating budget to over $200,000. Discussions on the 1964 Goodwill Tour completed the day's business.

Representatives of more than 70 donors to the FFA Foundation registered for the meeting on Wednesday. The FFA Foundation Board of Trustees, national FFA officers, and donor representatives heard reports on the Foundation and were told what a Foundation award has meant to a former winner by Charles Anken, Holland Patent, New York, dairy farmer.

On Thursday and Friday, the National FFA Boards of Student Officers and Directors met over a long agenda of organization business. It included many items affecting the National Convention in October—from selecting public speaking contest judges to approval of American Farmer candidates. While in Washington the national officers called on several agricultural organizations, ending with lunch the following Monday with top officials of the USDA, where they heard a discussion on the Rural Areas Development program.

It was a week that helped shape and guide national FFA policy. This series of meetings makes the week in July one of the FFA's most important sessions.

Balance and unlock feed nutrition

GIVE THEM THE

Help your animals get more nutritional power from their ration—and *balance* their rations, too: Feed Milk-Bank Feed Boosters by Kraft.

Pex products for poultry, Kaff-A Milk Replacer for calves, Kaff-A Booster Pellets for ruminants, Kraylets for swine, and Pace for horses. They're all made with milk by-products, rounded out with other vital nutrients. They produce faster, more economical gains, better health and resistance to stress, better productivity. And they do all this by adding the extra nutrition of milk by-products to the ration, and by unlocking more nutrition from the other elements in the ration.

Milk-Bank Feed Boosters are storehouses or banks for the key nutrients of milk: lactalbumin protein, milk sugar, vitamins, minerals and important growth factors—elements not found in ordinary grain rations, pasture, or roughage.

Write for details on feed programs with Milk-Bank Feed Boosters. KRAFT FOODS AGRICULTURAL DIVISION, 500 Peshtigo Court, Chicago 90, Illinois.

Foundation Chairman Keener, left, gives his experiences. Right, award winner Charles Anken and Dr. A. W. Tenney.

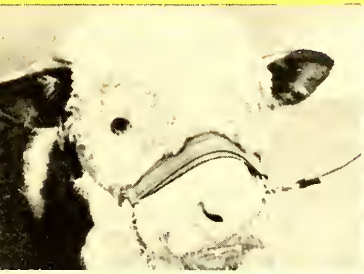
Officers lunch with USDA officials, Baker and Murphy (seated), Mobley of AVA (right, seated), and Office of Education leaders, Arnold (left), and Harris and Reed (right, standing).

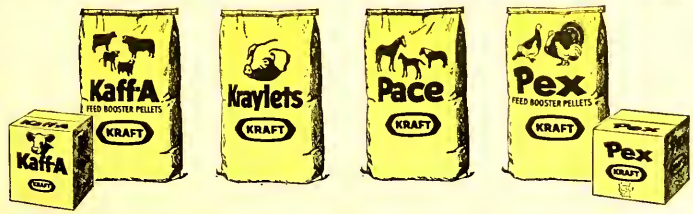
Typically busy business session of the FFA Board of Directors and the national FFA officers has attention of all.

National FFA Board of Directors met during the week to help decide policies and business important to the FFA.

MILK-BANK BOOST

Milk by-product feed boosters by Kraft





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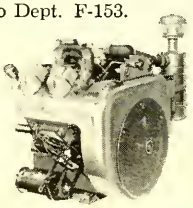
— ***so why bother with*** air-intake stacks, radiators, water pumps and jackets, fan belts . . . water and anti-freeze . . . power failures due to dry-ups, freeze-ups, or fouled and neglected water-cooling parts . . . a sudden drop in temperatures . . . cracked blocks and radiators . . . and costly, complicated servicing?

This fan for the air-cooled 60-hp Wisconsin eliminates them all. You have 60 rugged horsepower for *one-man, one-rig* haying even in plus 120° F. heat — with self-propelled swathers, balers, and bale wagons. *Don't settle for less.* Get Bulletin S-282. Write to Dept. F-153.



50-HP V-460D valve-in-head is smaller and up to ⅓ lighter than water-cooled engines of ⅔ its rating.

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MILWAUKEE 46, WISCONSIN
World's Largest Builders of Heavy-Duty Air-Cooled Engines — 3 to 60 hp.

Hamilton Georgia

I have enjoyed reading your fine Magazine for the past two years. I am a junior in high school and am very much interested in vocational agriculture.

I'm working hard on my Hereford calves now and intend to take animal science after completing my vo-ag work. Our chapter at school is working very hard in forestry, pasture, cattle, and hogs. Our quartet won the state championship and third in the tri-state area. And we'll strive to work even harder in the next few years.

Charles Dunn

Fort Scott, Kansas

Your Magazine becomes more interesting to me with each edition. I have been through high school for two years and am trying to decide if farming is for me. Many ideas have come to me from articles from *The National FUTURE FARMER.*

I would like to add my encouragement to your printing a monthly magazine. Keep up the publishing of the many exciting and interesting articles.

Alvin Conner

Akron, New York

I was first inspired in agriculture by working on my uncle's farm. I entered vo-ag and found the field of agriculture to be a very complex industry in which there are so many jobs a person can do. These are the reasons I joined agriculture and want to make a career of it.

Lynn Mietz

West Medway, Massachusetts

I enjoy your Magazine very much and feel it is very beneficial to almost every field of agriculture. However, since this country is becoming more conscious of beauty in and around the homes, I would like to suggest that you include more articles on landscaping and nursery work.

Since this is also a branch of agriculture and a field of work which is being entered more and more by FFA members such as I, my suggestion is that you enter more on that subject.

Frederick Sibley

You have a good suggestion, Fred. We will make a note of this editorial area and make every effort to include it in future planning.—Ed.

Arapaho, Oklahoma

Thank you very much for putting out such a wonderful Magazine for all the FFA members. My brother, a member of the Arapaho Chapter, has been receiving your Magazine for five years now. As each copy arrives, I try to get to read it first. I only wish it were a monthly publication.

Please renew my brother's subscription for another two years.

Linda Lighthill

West Frankfort, Illinois

It has been my delight to have been associated with the Future Farmers of America this past year. A more thorough understanding of agriculture and its importance has been revealed to me by this relationship. I sincerely believe that this Magazine has had a major part in this transition. It is written in a style that a novice of agriculture can understand the material. I deeply appreciate the existence of *The National FUTURE FARMER* Magazine.

Jay Boner

Centerville, Indiana

I am very glad to have the chance to continue receiving *The National FUTURE FARMER* Magazine. Although I'm not an active member any more, I do enjoy the articles and cartoons which your Magazine has published for the past several years since I have been a subscriber.

I have made past copies available at the service station where I work, and many people have picked them up and enjoyed much of the material. You have an interesting and informative magazine, and I trust it will continue as such. Best wishes for continued success.

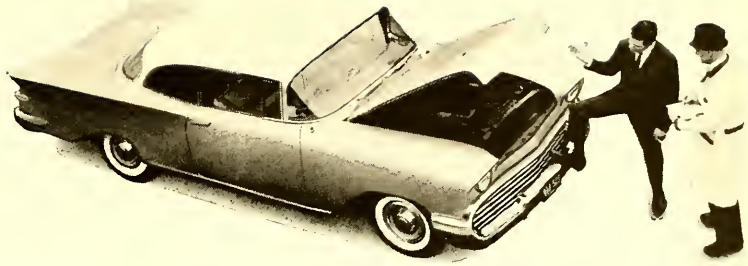
Ross Rhinehart

Middle Point, Ohio

I was very pleased to receive a copy of *The National FUTURE FARMER* again. I always enjoyed it through school and am very happy to subscribe to it again now. It will help me keep in contact with the organization.

I owe the Future Farmers of America a lot and am proud to have been one of its members. My father received the American Farmer Degree in 1938, and now he, my brother, and I are all farming. So you see, we do believe in the future of farming.

Gary Cooper



"It makes sort of a tic-tic-tic peep baa-room"

Imagine trying to diagnose an engine's ills from a description like that. And yet, good mechanics do it all the time.

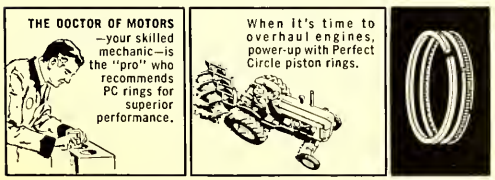
That's because most mechanics today are better trained than ever before. And part of that training comes from the makers of Perfect Circle piston rings.

Many years ago we set up our Doctor of Motors clinics to provide garage repairmen and farm equipment mechanics with specialized training in engine maintenance. Over 800,000 men have attended throughout the world!

Your skilled Doctor of Motors is a good man to see when *your* car or your powered farm equipment "tic-tic-tic's." And if his diagnosis calls for a re-ring job, he'll most likely recommend rings made by Perfect Circle.

There's a good reason for this. PC rings are specified as original equipment and/or service sets in 127 brands of engines and vehicles, including almost every American-built car, tractor or truck.

No other rings outperform Perfect Circles. No other rings do a better job of restoring like-new oil economy and power.


THE DOCTOR OF MOTORS
—your skilled mechanic—is the "pro" who recommends PC rings for superior performance.
When it's time to overhaul engines, power-up with Perfect Circle piston rings.

PERFECT CIRCLE

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Dr. J. H. Lintner, new coordinator of FFA-Peace Corps project in Pakistan.

FFA-Peace Corps To West Pakistan

AUGUST 20 marked a new milestone in the FFA's list of activities. It was the day officials signed into effect the FFA-NFA-Peace Corps project to send nearly 30 farm youths into agricultural service in West Pakistan. Named to direct and coordinate the project is Dr. J. H. Lintner, a veteran whose 16 years of vo-ag teaching in Ohio and seven years instructing abroad amply qualify him for the post.

The group of approximately 30 volunteers will begin training on September 27 at the University of Minnesota for the Pakistan project. In the three months before the first of next year, they will study the language and customs of the West Pakistan region, ways to introduce new farming methods, and how to bring a new understanding to the people they work with. When their training is completed on January 4, 1964, they will depart for the Kadura, West Pakistan, vocational school and their new assignments.

Dr. Lintner will work between the National FFA Office in Washington and the training sessions at the University of Minnesota, then depart with the group for West Pakistan. The former Ohio vo-ag instructor and father of the official FFA jacket served a total of seven years as agricultural advisor for the U. S. AID program in the Middle East before accepting the FFA-Peace Corps position this summer. His new duties will require him to direct the two-phase program, which groups agricultural education and mechanics and agricultural and community development as its objectives.

The former FFA and NFA members will bring a new understanding to the farmers of West Pakistan under Dr. Lintner's capable supervision.

This is the 22 that's made like a big-game cartridge

This is a Remington "Hi-Speed" 22. When you want a long-range 22 caliber varmint buster, this is the one to go with. We put it together as carefully as we do our big-game ammo. First, we start off with a strong, hard-brass case, loaded with special powder. We put in famous "Kleanbore" priming, the original non-corrosive mixture that helps protect barrel accuracy and life. Finally, we add exclusive "Golden" bullets, made to micrometer tolerances for fine accuracy. Result—Remington "Hi-Speed", the 22 with more speed and wallop at 50 yards than standard 22's have at the muzzle!

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All around the farm

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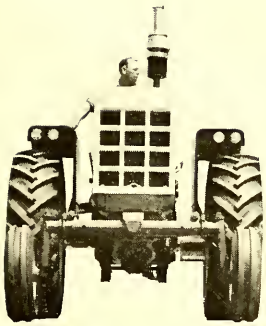

Wham! A rock in the field or a rut in the road can wreck a perfectly good tire. And the loss is more than money: Valuable equipment lies idle. Work stops. Reasons enough why so many of today's farmer-businessmen use B.F.Goodrich nylon tires.

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3. Turn box tops over to your chapter leader. Your chapter receives 50¢ for each box top.
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You can't do that without turning out an honest gun. And if one word ever described Winchester guns, it's "honest." The 290 wraps 21 shorts, 17 longs or 15 LR cartridges in just about 5 pounds of honest-to-gosh wood and steel craftsmanship. Honestly, what more could you ask? Only $52.90

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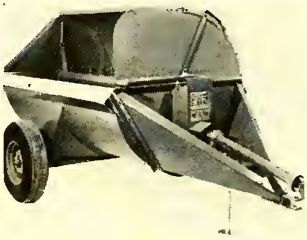
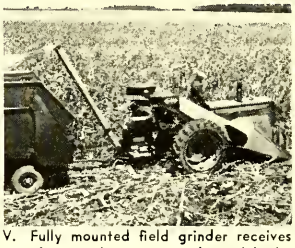
S. International Harvester's 706 tractor has 89 hp, power steering, and brakes. Eight speeds forward, four reverse tailor horsepower for economy. Designed for higher tillage speeds to cover more acreage. Larger 806 model is available with 110 hp for heavier work. (International Harvester)

Something New

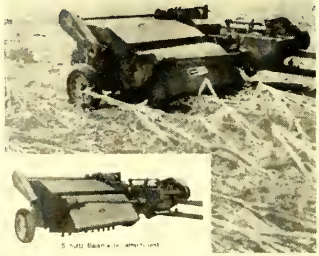


T. Compact side-delivery spreader handles liquid and frozen manure. Holds 100 bushels, yet has only two moving parts. Uses PTO to give even pattern. (Hawk Bilt Co.)

U. Unique link chain tool can be used to detach all sizes of links even under tension. Tool rotates to put links in proper position. Portable. (Ang Mfg. Company)



V. Fully mounted field grinder receives ears from gatherer, cuts cobs and husks, sizes particles, cracks kernels, blows mixed feed in wagon for silo. (New Idea)



W. Schultz Balemaster fits on front of baler to cut, shred, and bale corn stalks for use as bedding. Unit is driven from baler flywheel. (L. H. Schultz Mfg. Co.)

X. Automatic milker starts, strips cow, and stops when milk flow ceases. Units fit your pipeline or pails. (Sta-Rite)

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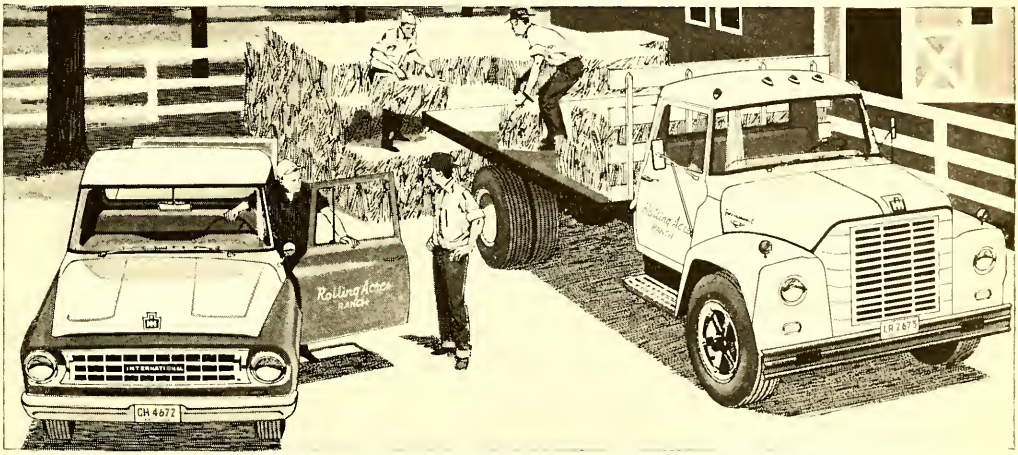

full-sized pickup or a sturdy truck for the big jobs...

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If you're looking for a low-cost truck to move those small loads around quickly and easily, the INTERNATIONAL Model 900 Pickup (top), with 4-cyl. 93 hp. COMANCHE® engine, will rate mighty high by any yardstick!

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To do your work the best way, there are over 100 other INTERNATIONAL light-duty models—pickups (Model 1100 shown below left), stakes, flatbeds. Power includes 4, 6 and V-8 engines.

And for bigger, bulkier loads, check into the LOADSTAR® models (lower right)—all-truck and heavy-duty engineered in every respect!

Come in to get details about these trucks or any others in the complete INTERNATIONAL line.

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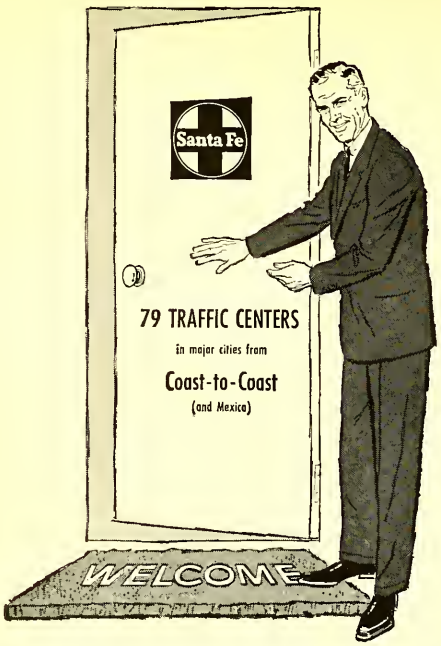

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FARM-CITY WEEK November 22-28

THE week before Thanksgiving, November 22 through 28, will find urban and rural leaders working together as never before. It's Farm-City Week, dedicated to strengthening the understanding between farmers and nonfarm workers.

Farm-City Week originated in the minds of prominent businessmen in the years following World War II. Such leaders as Dana Bennett of the Foundation for American Agriculture and Merl Tucker of Kiwanis International were among the first to conceive the idea. It was to be a nationwide public relations program to bring the people of the farm and the city closer together, and it would operate out of the Chicago offices of the Kiwanis organization.

And so in 1955, the first national Farm-City Week was proclaimed. Future Farmers can make this ninth observance even greater by starting to work now on such activities as local radio programs, church and school bulletins, exchange visits between farm and city youth, and tours to surrounding farms and agricultural organizations. Ask your advisor for details.

THE NATIONAL FUTURE FARMER SADLY REPORTS THE DEATHS OF

Jerry Ringo, national FFA vice president from the Central Region in 1956-57, who died July 28 in his native Kentucky. Jerry was 26 and had been hospitalized for a blood disorder, which was complicated by a heart condition. He was editor and publisher of the *Kentucky Mountain Journal,* a paper which he had founded at Frenchburg, Kentucky. His record in the FFA included a term as president of the Kentucky Association, state public speaking winner, and a tour of Japan representing FFA and the State Department. He was active in politics and at 19 was the youngest delegate to the 1956 National Democratic Convention.

and

Herbert R. Damisch, state FFA advisor in Illinois, who died August 11 of a heart attack. Mr. Damisch had completed a two-year term on the FFA Board of Directors earlier this year and was to have received the Honorary American Farmer Degree at the National FFA Convention. He held the position of Chief of Agricultural Education in Illinois and was a leader in vocational agriculture on both the state and national levels. Under his guidance, the Illinois FFA Association moved forward to greater service to farm boys in a number of areas.

We can tell you in one word why more people buy Remington 22's than any other make...NYLON!

Du Pont "Zytel" nylon is what makes Remington 22's better than other 22's. Nylon means more accuracy—because a nylon stock never swells, shrinks or warps from changes in temperature or humidity. So once you sight in a Nylon 22, it *stays* sighted in—until *you* change the sights. And nylon permits three-point bedding for greater accuracy—the same type of bedding that gives expensive target rifles their accuracy.

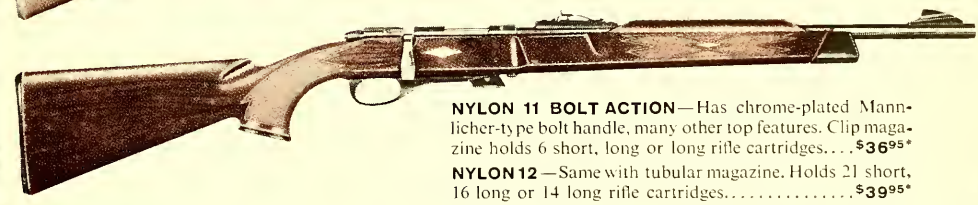
Nylon stocks are better-looking, too. That's because only nylon gives you such graceful lines, handsome checkering and inletting—things you don't find on comparably priced 22's.

Dependability? Nylon wins, hands down! For example, the Nylon 66 Automatic is the most trouble-free automatic ever made. The action rides on "greaseless bearings" of self-lubricating, long-wearing nylon. And all Remington nylon stocks are guaranteed not to warp, crack, chip, fade or peel for the life of the rifle, or we will replace it free.

So why buy a 22 that really isn't new . . . hasn't changed in years. Not when you can have a brand-new, modern, guaranteed Remington Nylon 22. And you can pick your model and price from six models in three great actions:

NYLON 66 AUTOMATIC—Most trouble-free automatic made. Grooved for tip-off 'scope mounts. Holds 14 long rifle cartridges.....$49.95*
Also in striking Apache Black and Chrome.....$54.95*

NYLON 76 LEVER-ACTION—Fastest, most accurate lever-action made. Grooved for tip-off 'scope mounts. Holds 14 long rifle cartridges. In Mohawk Brown.....$59.95*



NYLON 11 BOLT ACTION—Has chrome-plated Mannlicher-type bolt handle, many other top features. Clip magazine holds 6 short, long or long rifle cartridges....$36.95*

NYLON 12—Same with tubular magazine. Holds 21 short, 16 long or 14 long rifle cartridges.....$39.95*

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1963 Regional Star Farmers of America

By Paul Weller

Keeping a close watch on the irrigated cropland is important for Dwayne Disney. These crops will help feed the herd of 51 milk cows.

Here are the four top American Farmers and what they did to win.

Dwayne Disney, *New Mexico*
Pacific Region Star Farmer

DWAYNE Disney's lone dairy heifer won second place at a dairy show while he was still in grade school. It was enough to convince the newly named Star Farmer of the Pacific Region to raise cattle on his father's farm near Portales, New Mexico. He helped build a dairy barn onto the hay barn, and it wasn't long before he had accumulated 36 registered Jersey cows and was selling milk.

When Dwayne entered vo-ag at nearby Portales High School in the fall of 1958, he owned nine cows and eight heifers of the herd. During three years of vo-ag, it was frequent trips to county fairs and dairy shows with anywhere from seven to 27 head of show cattle. A total of 30 grand champions was entered those years by Dwayne. Then in 1959, he bought a heifer at an All-American show in Ohio.

Money from outstanding animals such as these, plus returns from over 100 acres of grain, cotton, and peanuts while in high school, started a college fund for Dwayne. His love for cattle had burned a desire to become a veterinarian, and as he and his father added surrounding land to their 552 acres, he planned for college. The latest land he purchased was leased to a poultry producer, and the lease payments applied to the loan he established when he purchased part of the home farm.

Dwayne looks ahead to six years of college and the day he can return to his farm with a degree in veterinary medicine. As for now, he owns 320 acres of crop and pasture land; has a 50 percent partnership on 232 acres more; co-owns 51 dairy cows; and still farms cotton, hay, peanuts, and silage. This, plus another 40 acres he rents nearby, will help send him through veterinary school. From that lone heifer to a net worth of over $38,000, Dwayne Disney has climbed into the FFA's "Big Four."

Robert Cummins, *New York*
North Atlantic Region Star Farmer

IT WAS in 1955 that Robert Cummins, son of a rural electrician in Warsaw, New York, borrowed money to buy his first heifer. Today, he is Star Farmer of the North Atlantic Region with a supervised farming record that would be the envy of any Future Farmer.

In the months following the purchase of the calf, Bob got a job helping an elderly neighbor, Clifford Elwell, with the farming chores. As his desire for farming grew, Bob decided to enter vo-ag at Warsaw High School in the fall of 1956. Using his vo-ag training, he and his new boss set out to build and remodel the aging farm. First, Bob helped establish a dairy herd and remodel the barn to sell milk. From here he brought in his own growing herd of eight cows and borrowed money to go into a one-third partnership.

Improvement is apparent as Bob Cummins checks records with Clifford Elwell.

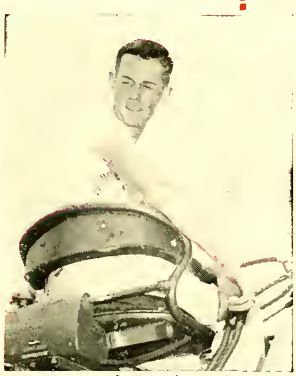
Months of hard dedicated work began to pay off as the run-down farm was brought back under the Future Farmer's close supervision. Records were kept, fields fertilized, and the dairy herd culled. In 1961, the year following graduation, Bob bought into a 50-50 partnership. By this time he had half interest in 56 cows, 145 acres of crops, and the 200-acre dairy farm.

It wasn't uncommon to find the Future Farmer rewiring a building, remodeling storage areas into heifer barns, or helping build a new concrete silo. The legal partnership splitting the operation now gives Bob first option to buy the farm when he becomes 21 this fall. The once run-down northern New York farm now boasts a herd of 65 dairy animals, modern dairy equipment, and a herd average of over 13,000 pounds of milk. Its fields have begun to produce three cuttings of hay where only one once grew. When this new Star Farmer takes over complete operation this winter, he can look back to the day only eight years ago when he had only a heifer.

Jon Ford, his father, and advisor look over the herd of pure-bred Herefords, part of over 90 animals Jon now owns.

Planning and record-keeping with parents and FFA advisor helped Stan Amundson become a Star Farmer.

The Star Farmer of America will be selected by a distinguished panel of judges at the National Convention in October. See if you can outguess them. Write in your choice here!



Over 150 acres of grain keep Jon busy on school weekends and over summer.

The winning team of Jon, with father and advisor, inspects one of the calves.

Jon Ford, *Oklahoma*
Southern Region Star Farmer

FEW FUTURE Farmers have started with so little yet gone so far as 19-year-old Jon Ford, Star Farmer of the Southern Region. The slender college student was a lad of nine when his father brought home 10 exhibition chicks to their farm near Helena, Oklahoma, back in 1952.

In each of the two following years, he purchased 240 birds representing 24 breeds and took them on the show circuit. Two years later with a profit of $250 from the chickens, he invested in a beef cow and heifer.

The following summer he bought a registered gilt and began to plan for crops on the home farm. But that fall of 1957, at the age of 14 and with only a few months of vo-ag behind him, Jon bought a neighbor's farm of 160 acres for $24,000. Without a doubt, he was the only vo-ag freshman in the Helena Chapter with his own farm. To accomplish this, the ambitious Future Farmer got an insurance company to take a first mortgage of $8,000, the former owner to take a second mortgage of $9,000, plus a third mortgage from his father for $7,000.

Jon's big break came that following spring when one of his barrows was named grand champion at the Oklahoma City Livestock Show. As a result, he was able to sell the hog and littermates for $2,200, all of which went toward the mortgage. Immediately, Jon planted wheat on the farm and expanded into beef, sheep, and more swine.

Following high school graduation, it was on to college for Jon. Hard work during the summer and vacations, plus help from his father, has enabled him to keep the farm increasing in value and scope. Today, with two years of college, 215 livestock show ribbons, and scores of leadership positions behind him, Jon Ford counts nearly 90 beef animals, a $40,000 farm with all but $3,500 paid off, and 150 acres of grain to his credit.

Stanley Amundson, *North Dakota*
Central Region Star Farmer

"I WAS about the happiest boy in North Dakota when I enrolled in vo-ag at Valley City," Stan Amundson told a member of the state FFA staff recently. The blond, reserved Star Farmer of the Central Region almost didn't get into the vo-ag program when he entered high school, though, because the nearest FFA chapter was a 30-mile drive away. But his heart was set on farming, and nothing could keep him from enrolling in vo-ag in 1957.

That fall, Stan had livestock holdings of sheep, some polled Herefords, and a registered pig. The 320-acre home farm north of Valley City held promise for expansion in grain and sheep enterprises, and the energetic young farmer jumped at the chance to increase his holdings. Carefully planned loans from his father and the local bank put him in business.

Every hard-earned cent went back into the Amundson's North Dakota farm. Corn, grain, and flax were planted. More livestock, including several dairy cows, was added to the farm inventory. Machinery was either traded or purchased to give Stan and his father more modern equipment.

With amazing efficiency in his production projects and a plan whereby he could rent and use his father's machinery and buildings, Stan worked into full ownership of livestock worth over $17,000, plus more than $10,000 in machinery. Two tracts of land totaling 650 acres are rented by Stan, in addition to the home farm which he farms in partnership with his father. Few places will you find more diversified than this Star Farmer's operations. There are 30 dairy cows, 200 laying hens, more than 80 hogs, 60 sheep, and crops by the hundreds of acres.

With the help of his father, Roy, and his advisor, Charles Challey, Stan Amundson will return from Kansas City this fall to continue on his life's ambition of being a good farmer.

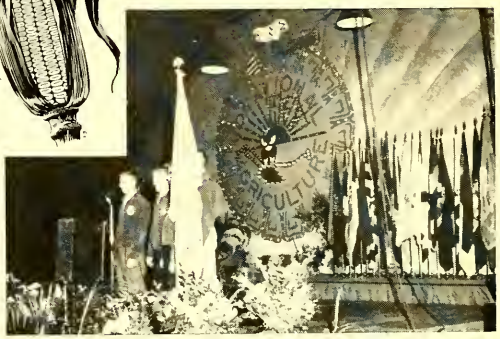
". . . wherever corn is grown and Future Farmers meet!"

HERE'S THE BIGGEST MEETING OF THEM ALL!

Kenny McMillan, National FFA President, has issued the call for

THE 36th ANNUAL NATIONAL FFA CONVENTION

OCTOBER 9-11
KANSAS CITY, MISSOURI



COME WITH us as we briefly tour backstage to learn of the plans for the 36th National FFA Convention. If you'll be one of the nearly 10,000 Future Farmers gathered in Kansas City's Municipal Auditorium for the three-day event, here's what you can expect to see:

Convention week starts early for the national officers. They first meet on October 4-5 and will meet jointly with the FFA Board of Directors on October 6-7. Then on October 8, at 10 a.m., official delegates, judging teams, and pre-Convention officials can register at the Municipal Auditorium before the Officer-Delegate luncheon at noon. In the afternoon, educational tours beginning at 1 p.m. and meetings of the nominating committee and state advisors will be held. Regional public speaking contestants go to the American Hereford building and the FFA talent auditions. In the evening an inspiring Vespers Program will be held at the Auditorium at 8 p.m., followed by rehearsals for the American Farmer and Star Farmer programs.

Wednesday, October 9, starts with registration at 8 a.m., and the opening session begins at 9 a.m. in the Auditorium. It features a concert by the FFA Band, a welcome by Kansas City Mayor Davis, a speech by Wisconsin Commissioner of Agriculture D. N. McDowell, and a Future Farmer's speech on the FFA's Code of Ethics.

At 2 p.m., the second session opens with the conferring of Honorary American Farmer Degrees; then more than 380 Future Farmers will receive their American Farmer Degrees. Governor John H. Reed of Maine is featured speaker for the session, and the FFA talent review is scheduled for 7:15 p.m.

Third session, beginning at 8:15 p.m., includes the National Public Speaking Contest and the awarding of Gold Emblem Awards to deserving chapters.

The fourth session begins at 9 a.m., October 10, and will include a host of distinguished guests and speakers. Master Hershel Newsom of the National Grange gives the address, while guests include Senators Harry Darby and Frank Carlson. Dr. W. M. Arnold of the U. S. Office of Education will bring greetings just before informative talks on "DECCA" and the role of Future Homemakers in the high school program. A highlight will be the FFA Pageant entitled "Patriotism and the FFA."

After one of the many service club and commercially sponsored luncheons for special groups that are held throughout the Convention, the national officers will open the fifth session at 2 p.m. to award distinguished service plaques and the farm proficiency awards. Just after the session, at 4:30 p.m., invited guests will meet FFA Foundation donors at a reception held at Hotel Muehlebach.

That evening at 8 p.m. will be the highlight of the Convention when the Star Farmers are introduced and the Star Farmer of America is named. Activities include the massing of the state flags and the movie entitled "1963 Star Farmers."

Friday's seventh session, beginning at 9 a.m., schedules Agriculture Secretary Freeman as the main speaker. He'll be followed by election of national officers and a talk on the "People to People" program. Then it's out to the American Royal for "FFA Day" and an afternoon of fun. The final session begins at 7:15 p.m. Installation of new officers and special entertainment will then bring the 1963 Convention to a close.

Think it's a thrill-filled week? You're right. If we don't see you in Kansas City, read about it next issue.

NEARLY 150 Future Farmers and their advisors gathered around a steaming barbecue pit earlier this summer at Michigan State University and helped close another year's unique poultry activity. As chickens browned over the charcoal fire, talk turned back to problems and experiences of eight weeks of feeding, grading, and recording groups of broilers entered in Michigan's FFA Poultry Improvement Program. It was clear to the handful of visitors that this annual event was an important part of vo-ag to the 29 participating chapters.

Doing To Learn ...with poultry

Future Farmers gather to learn poultry processing facts.

By Paul Weller

What had started out some years back as a day to interest Future Farmers in a career in poultry had blossomed into a golden opportunity for students to learn firsthand poultry production and processing. Michigan State University's poultry department had thrown open its facilities and staff to the state's FFA chapters. With education an important phase of the program, Future Farmers could now follow a broiler from the time it was a day old to the final stages of processing some eight weeks later.

And best of all, for the chapter treasurers the Michigan FFA Association set aside $400 for the poultry improvement contest, rewarding those whose broiler entries proved best in feed efficiency, performance, and carcass appearance. Here was where Future Farmers could learn the skills of poultry production.

It was Monday, February 4, when Advisor Roy Miller and his Future Farmers from the Hopkins Chapter received their shipment of straight-run broiler chicks. Roy had forwarded his chapter's entry forms to Charles Sheppard at the University a few days before, giving notice that Hopkins Chapter would take part in the eight-week broiler production contest. Now it was up to the chapter to get the best feed efficiency possible with the lowest mortality. Records telling of the number of cockerels and pullets, type of feed used, costs, and efficiency obtained had to be kept. Later at the University, they would be judged on accuracy and neatness.

Eight weeks later, on April 3, Advisor Miller helped weigh each bird and record the total to finish the chapter records. Then members helped him select an entry of 10 cockerels from the flock, uniform in size, body shape, and fleshing for the judging. Leg bands with assigned numbers would tell recorders at the University which chapter produced the birds.

Advisor Miller and his carload of Hopkins Future Farmers pulled up early at the University's Anthony Hall for the day of processing and judging. Poultry specialists ushered the group into the processing area where each group of broilers would be judged. There were several entries at Anthony Hall that day from individual Future Farmers' own farming programs, but most came from chapters such as Hopkins.

As time for the 10 Hopkins birds to be judged rolled around, chapter members stepped up to kill and dress the birds under the supervision of University specialists. Professional eyes watched as the birds went down the processing line with Hopkins Future Farmers dressing them. It was an experience to be remembered for those who had never dressed a chicken. Judges at the end of the line carefully inspected each of the 10 birds, judging them on finish, conformity, and absence of pin feathers. After the records and efficiency scores were added, Hopkins would have its final standing.

Later, as dressed birds were turned over the barbecue area to show Future Farmers how mass barbecuing is done, Advisor Miller knew his Hopkins Chapter had outlasted 47 others to win. Based on feed conversion of only 1.9 pounds of feed to produce each pound of liveweight bird and averages of 4.1 pounds per bird at eight weeks, plus other factors, his Future Farmers chalked up 91.55 points out of 100 to be named poultry improvement champions. But Miller knew that more than an award was won: experience in poultry production and processing was his chapter's most important gain.

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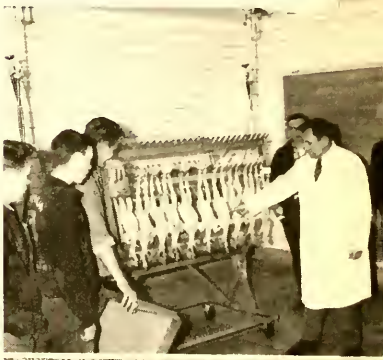
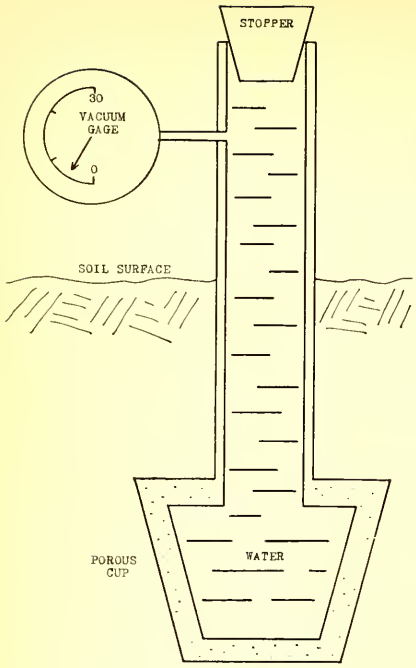
Dressing birds and picking pinfeathers begin the day-long list of activities.

Poultry specialists point out desired finish and conformity of each broiler.



Demonstrations include how to set up and barbecue quantities of chickens.

With dressing and classes over, it's a barbecue for hungry Future Farmers.



Schematic drawing of a tensiometer.

SOIL SUCTION and Your Crops

By Miles Mayhugh

This natural force at your crop's roots can deny them adequate moisture even though rainfall has been normal and available.

WE ALL know that crops take up water from the soil. But what most people don't know is that when the soil becomes dry enough, it develops a powerful force that can prevent the plants from taking up any more water. If this happens, the plants wilt and even die.

Scientists call this force "soil-moisture tension," or "soil suction," and have invented an instrument for measuring it. The Soil-Moisture Tensiometer, which measures the tension (suction) in the soil water, is proving to be a valuable guide to the use of water in areas where irrigation is practiced. It can bring more economical use of water and healthier, more profitable crops.

In parts of the United States the amount of water available in the soil is the most important factor in successfully growing crops. In some of these areas, such as in our western states, the entire supply of water must come from irrigation. In sections of the Southeast and in the Great Plains, rainfall supplies only part of the necessary water. Additional water is needed and is furnished by irrigation during part of the growing season.

Immediately after a good rain or an irrigation, the soil in which the plant roots are growing becomes saturated. This means that all of the pores, or open spaces, in the soil are full of water. Some of this water will move down through the soil beyond the reach of the plant roots. Some of it will be evaporated from the surface of the soil. Water that is not lost by one or the other of these methods will remain in the soil and can be taken up by the plants.

Plant roots draw water first from the larger pores. When the pores near the roots are emptied, the water collects in layers around the individual particles of the soil. At first, these layers are thick and the plant roots have no trouble drawing water from them. However, as more and more water is taken up from the soil, the layers become thinner and are attached more firmly to the soil particles.

The terms "soil-moisture tension" and "soil suction" mean the same thing and refer to the force that holds the water to the soil particles. Soil suction becomes greater as water is taken from the soil, and the plant is forced to exert more and more effort to draw water up through the roots. When the suction becomes so strong that the plant can not overcome it, the plant wilts. More water must be supplied either by rain or by irrigation, or the plant will die.

Because of differences in particle size and the different materials making up soils, they will hold different amounts of water. One method of measuring the amount of water in a soil is to take a sample, weigh it, evaporate all the water by heating the soil, and then weigh the sample again. The weight lost in drying is the weight of the water that was in the sample. From these weights a percentage is calculated. This represents the percentage of water in the soil and indicates the weight of water per hundred units of dry soil.

If the soil is sandy and contains 30 percent water, the plant can drink it with little effort because the water is standing in the large pores of the soil. If, on the other hand, a soil made up largely of clay contains 30 percent water, the plant cannot take it up. The water is spread over the soil particles in an extremely thin film, and the suction is so great that the plant cannot overcome it.

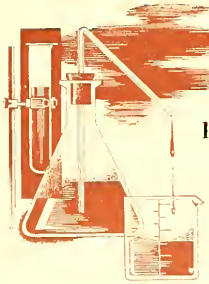
Because a plant growing on a soil "feels" the suction rather than the actual quantity of water in the soil, it is desirable to have some way to measure this suction. Measuring the soil suction gives the farmer knowledge of how soon his crops will wilt unless more water is furnished them.

The simplest form is the tensiometer consisting of a porous cup attached by means of a rigid tube to a vacuum gauge. In operation the porous cup is buried in the soil with the vacuum gauge above the surface. The cup and tubing are filled with water.

As the soil surrounding the tensiometer cup dries out, the water is taken from its larger pores, and suction begins to build up. Water can move freely through the walls of the porous cup, so the water inside the cup flows out into the surrounding soil. This leaves a suction inside the cup exactly equal to that in the soil and is measured on the vacuum gauge. If the soil is watered so that it becomes saturated, water moves back into the cup, and the gauge reading is reduced to zero.

Tensiometers are manufactured commercially and are becoming widely used in irrigated areas. Many users report better and more profitable crops as the result of keeping the soil suction within the range most favorable to plants. ◆◆◆

Mixing Science and Agriculture



An interest in science is helping this Future Farmer gather important research while winning awards in a national scientific fair.

Basement laboratory gives Dennis Crowe a place to check the heartbeat of a test rabbit for his coccidiosis research.

AS DENNIS Crowe boarded a plane for Albuquerque, New Mexico, earlier this summer, one of his dreams was coming true. For a long time he had wanted to attend the National Science Fair-International and now was on his way after winning the Fox Valley Science Fair back home at Clintonville, Wisconsin.

The 16-year-old Future Farmer's flair for science had prompted him two years ago to develop a project on antibiotics in soil. This was a hit, and Dennis began to devote much of his time to scientific agriculture. He momentarily thought back to that day his science teacher interested him in entering the local school science fair. He was told there would be regional fairs, then the international event for finalists from each region.

Dennis learned that local civic organizations and business firms sponsor many science fairs for students such as himself to compete for awards and a chance for an expense-paid trip. A team of judges would check each finished project for such areas as scientific thought, creative ability, and skill. But because all high school students are welcome to enter the competition, the National Science Fair-International organization developed a quota system to bring about eliminations before the final competition. Dennis knew he would need a well-planned project.

His goal of some day becoming a veterinarian took him to the Circle H Ranch, a local riding academy, where he broke and trained horses during off-school hours. Then one day last summer, Dennis observed internal parasites coming from one of the horses in the corral. This aroused his interest so that he took the pests to a local veterinarian to find out as much as he could on the subject. "After looking through his medical books, I realized that there wasn't detailed information available on the subject," Dennis told his advisor, E. A. Hutchinson.

Here was the basis for his extensive scientific study. He chose coccidiosis in rabbits because it was not possible to work with larger animals at his home. Then he began the task of gathering information from medical journals and libraries. Technicians at the local Clintonville Community Hospital helped him gather materials, while local veterinarians showed him their equipment. Dennis began plans for a laboratory in his basement.

Last September, Dennis brought $40 worth of lab equipment and $60 worth of other materials to his basement laboratory to begin work on the internal parasites. Based on what was already known about the life cycle of coccidiosis, Dennis started his research on the diagnosis, treatment, control, and morphology of the parasite in rabbits.

He injected live parasites into one rabbit, while the other animal remained free of infection. When the infected rabbit died, the Future Farmer performed a post-mortem examination to reveal the characteristic lesions of the intestines. A third rabbit was infected, then treated with serum to prove whether a serum could eradicate the parasite. Dennis' research proved this to be impractical.

As each step continued, Dennis made colored slides and sketches of what was happening. Six months of work and preparation were behind him as he journeyed toward the international event at Albuquerque this past May. As Dennis set up his coccidiosis display that warm day, there were 410 other entries from 46 states and five foreign countries.

When the judges had finished their inspections and questions, the Wisconsin Future Farmer had become one of 139 finalists, and received a fourth place award. The solid silver medal in his hand, Dennis Crowe returned to his home town to work toward another project and another win.

"May I Present..."

The impression you give guests of the FFA comes largely from the way they are introduced. Can you present them correctly?

By Roland Espenschied

DOES THE leadership training in your chapter prepare you to make personal introductions? These are most important in making friends for both you and the FFA.

Your FFA meeting has gone along smoothly, and it is time for the speaker of the evening. How do the chapter members see him? Their impression depends to a large extent upon his introduction.

Future Farmers, as the future leaders of agriculture, should know how to introduce a speaker properly. The image of the FFA is affected by the introductory speech. A guest speaker will carry away an image of the FFA that is not unlike the introduction he receives. If he receives a brief, sincere, and enthusiastic introduction, he will hold the FFA in high regard.

When the Future Farmer prepares his speech of introduction, he should answer these questions: Who is the speaker? Where does he come from? How is he qualified to speak on the subject? Why should I listen to him?

Who is the speaker? The audience usually wants to know the speaker's name. Introduce the speaker as someone they would like to know! Check with the speaker before the meeting to be sure you have the pronuniciation correct as he desires it. If the speaker's name is not familiar to the audience, give it at both the beginning and end of the introduction. If the speaker is well known, the speech of introduction should be brief. If not, the speech of introduction becomes more important in arousing interest.

Where does he come from? Listeners usually like to hear both where the speaker came from originally and where he comes from now. Try to find a common bond that will link the speaker with the audience. If the speaker was a Future Farmer, this fact will develop a good feeling among the chapter members.

How is he qualified? Select those facts of the speaker's experience, abilities, and qualifications that relate to the subject. Describe interesting facts about his life and achievements, but give evidence that the speaker is qualified so that his speech will have the right reception.

Why should I listen to him? Show a need for the information on the subject. Develop interest in the subject by linking it with the interests of the audience. You may wish to create suspense: "What will happen to our present water supply if the proposed action is approved by the county authorities?"

Your remarks covering these four questions should be directed to the audience. Your concluding remarks should be a formal introduction of the speaker to the audience, restating his name: "May I present to you a friend of the Future Farmers of America, Mr. Tom Smith." You should now turn to recognize the speaker, remain standing as he comes forward, and be seated when he acknowledges your introduction.

As you expand the answers to the four questions into your introductory remarks, keep the following suggestions in mind:

1. Be brief—the audience wants to hear the speaker!
2. Speak loudly and clearly.
3. Check the introduction you plan to give with the speaker.
4. Use humor—if in good taste. Ask the speaker if he minds a joke about himself. If in doubt about a joke, omit it.
5. Adjust the nature of the introduction to the tone of the speech.
6. Be enthusiastic.
7. Announce the title and the subject of the speech correctly.

Here are a few of the pitfalls to avoid when preparing and giving the introductory speech:

1. Do not use trite remarks as:

"Our speaker needs no introduction."

"We are greatly honored by . . ."

2. Do not talk about your own speaking experiences.
3. Do not build up the speaker too much—it may be impossible for him to live up to your description. Avoid statements like:

"Our speaker has a national reputation as the greatest living authority . . ."

"If you have never heard this man before, you are about to hear the funniest speech you have ever heard."

4. Do not give your opinion on the subject and steal the speaker's material.
5. Do not mix in announcements and reports with an introduction.

" . . . and after the speaker finishes, we'll have refreshments"

"While Mr. Fox is coming forward, our speaker next month will be . . ."

"Since we are low on funds, we chose tonight's speaker because . . ."

6. Do not embarrass the speaker by:

Apologizing for the fact that he is a substitute.

Apologizing for the fact that he is not well known.

Telling embarrassing stories about him.

7. Do not annoy the speaker by mispronouncing his name. A man's name is more personal than his toothbrush. He knows exactly how he wants it pronounced. It may be spelled "Shirtsleeve," and he wants it pronounced "Cuff." Pronounce it correctly as he desires it.

These are some suggestions to help you prepare your speech of introduction. Remember, the chapter members want to know the speaker's name, his present position, where he came from originally, a few of his qualifications, and why his subject is important to them. They want you to present this information briefly, sincerely, and enthusiastically. ◆◆◆

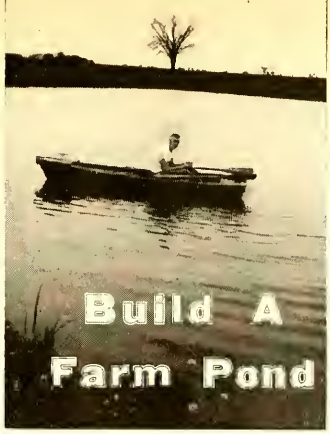
By Dale Rhode

IN RECENT years many people have built ponds on their farms. My father and I talked about it many times, but we probably had the same questions and reservations about a farm pond as you have. Is it too expensive? Do we have the right natural conditions? Can we get help from a specialist? What satisfaction does a farm family get from a farm pond?

I discussed this with my advisor, our soil conservationist, and many others. We tried to answer these questions before we started. Then I studied several of the conservation references we have in our vo-ag room at school.

We built a pond and are glad we did. I would recommend a pond to anyone who has land that drains naturally into a large enough basin and subsoil sufficiently fine in texture to hold water.

Our place has seven natural springs feeding a creek in our pasture. The land around it is not very high in value,



Two acres of pond for Dale to fish.

but our county conservationist told us it had a good subsoil, consisting of lots of clay.

We had a crane and bulldozer dig out and level the pond. It took about a week to do most of the work and another week to fill it up. For our drainage and overflow we made a standpipe out of culvert, which now empties into the creek from the bottom of the nine-foot-high dam. We put in a drain pipe valve to drain the pond, if necessary.

The pond is about two acres in size and about seven feet deep at the greatest depth. We plan to put some trout in the pond soon, since it is spring-fed with cold water.

We have had some trouble with muskrats coming in from the creek and burrowing into the dam, causing it to break away. Then we trapped the rats to bring in a little extra income, and we are now using chicken wire to keep them from burrowing through.

Now we are planning a recreation area down there since it is good for duck hunting. In the winter there is plenty of ice for skating.

The construction of the pond didn't cost over $700. I believe lots of ponds could be put in for a great deal less money, and I heartily recommend it for any FFA member.

"Here's where pork chops come from," George Salenbien tells his audience.

Dundee's Animal Fair

First graders crowd around sheep pen to hear Ron Waltz's lamb discussion.

DESPITE all the modern rockets and machines, the American people are still dependent upon farm animals. This fact was brought to the attention of the younger set around Dundee, Michigan, when Future Farmers decided to sponsor an animal fair.

Plans shaped up nearly three years ago when Lee Flegel's Future Farmers opened a two-day event for more than 1,000 elementary students in the Dundee Community School. The event was called "Man's Dependence Upon Animals" and set out to help others to understand animals and their importance.

Advisor Flegel and his chapter realized that many children know little of the origin of milk, pork chops, or wool coats because they are often far removed from the farm. An animal fair could acquaint them with farm animals and the products they furnish.

Last fall's fair was ushered in with an assembly for each grade level of the elementary school. Dundee's FFA officers explained how animals provided them with food, transportation, clothing, medicine, and power to do work. Then the Future Farmers showed a movie which told how a city boy visited a farm and found that farmers lived much the same as he did back in the city.

After the movie the students climbed into farm wagons and were taken for a hay ride to the barn where Future Farmers had assembled their animals. Grouped in tours of 10, the students started around to see the farm animals, accompanied by a teacher and one or more Future Farmer guides.

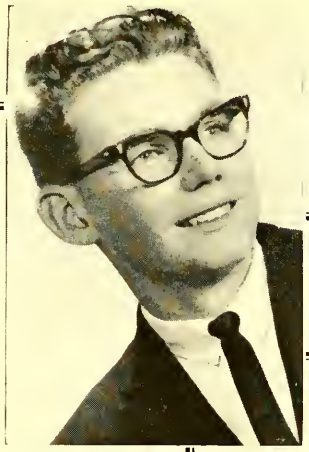
The animals were arranged in pens in about the same order that their ancestors were tamed. First was the dog, the first animal tamed by ancient man and used for hunting and protection. Excited students learned that wolves, jackals, coyotes, and foxes are all descendants of this particular animal. From here the tour led to a grain display, arranged to point out how man discovered he could raise corn, wheat, and oats for food if he settled down in one locality.

At each station was a Future Farmer to point out the facts about the animal. Fascinated students learned that Columbus brought the first cattle to America on his second voyage. They were told by their blue-jacketed guides that swine were used 3,000 years before the birth of Christ because pork was found to be very easy to prepare. And not to pass by the horse, Future Farmers explained that it was tamed 5,000 years ago for meat, work, and recreation.

As a finale, a display of silage, hay, and grain used in animal rations was explained to the visitors. Each student learned how these rough foods are turned into dairy and meat products by the animals. Dundee's Future Homemakers elaborated on how foods in each of the basic groups are available because of animals.

Another hay ride took the students back to their regular classes. Each teacher took a souvenir booklet prepared by the Future Farmers which told of the subjects discussed. Now looking forward to this fall's animal fair, Dundee Future Farmers have a program that has given them experience in group management and the feeling of serving others with a memorable experience.

Opportunities In Agriculture



There are dozens of career opportunities for young men with agricultural training and backgrounds. This former Future Farmer lists eight career areas and how you can plan for your place.

By
Leslie Dewey

DID YOU get up this morning and milk by hand? Did your arms get tired of carrying water to your livestock? What about that new section of fence that you and your dad strung the other day; did you have trouble finding young trees that were the right size for posts? Did the flies bother the horses while you were plowing Saturday?

These questions may sound silly to you, but I could be seriously asking them if it weren't for the many industries that are helping farmers today.

I'm sure you didn't milk the cows by hand this morning, not unless the milking machine was broken down. You probably checked the automatic fountains in the feedlots to see if they were working. The fence you strung was of steel or treated wood posts and barbed wire that were bought in town. Flies don't bother a tractor in the least.

Where have all these developments come from? They are a result of the combined efforts of farmers, manufacturers, research workers, educators, and others connected with agriculture who work for the betterment of the farmer and farming methods. It has become next to impossible for a farmer to operate without the help of these people. We often fail to fully realize just what the term agriculture really includes.

I am enrolled at Iowa State University majoring in agricultural education. I intend to teach vocational agriculture some day, but what really interested me in this area was the wide variety of jobs open to ag education graduates. My main interest has always been with farming, but my circumstances made it impossible to go back to the farm. I did the next best thing by going into an area where I could help farmers.

I was really surprised when my vo-ag teacher explained to me the many fields open to agriculture college graduates. For example, agricultural education graduates of the past few years have gone into sales, extension work, college instruction, government agencies, farm organizations, industry, and business as well as teaching.

These are just ag education graduates. For other ag college graduates there are seven major agricultural fields each containing dozens of different jobs. The other seven are research, industry, business, communications, conservation, services, farming, and ranching. There are more than 15,000 new jobs each year and only about 7,000 graduates to fill them. There is a job in agriculture for every interest.

If you have an interest in agriculture but aren't sure what area you'd like to go into, why not check with your advisor? Mine helped me and I'm sure that others would be more than happy to help. Another thing you might try is writing to your state agricultural education department. Most of them have a lot of good material on careers in agriculture.

I suppose many of you have already decided to go into farming. There is no more rewarding career than farming, but remember that it isn't the only agricultural occupation. Our nation's economy and our standard of living depend upon farming, but farmers depend upon the efforts of thousands of people on their behalf.

These people are important and necessary for the advancement of agriculture. The satisfaction of seeing crops grow and livestock produce and knowing all the people that are behind these things is what convinced me on a career in agriculture.

My greatest moment in life is going to be when I see the proud look on a farmer's face as he displays his prime beef or his 120-bushel-per-acre corn and know that I had some part in his success. Wouldn't you like to have a part in it, too?

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Vern goes over an item of farm business with an older brother.

The main feedlot on the 600-acre France farm takes much of Vern's free time.

VERN FRANCE

National FFA Student Secretary

This national FFA officer is an important member and stockholder of a farm corporation worth over $150,000.

COME WITH us to Gooding County, Idaho. You first cross the Snake River into flat farmlands spotted with trees and irrigated fields of crops. There are 1,000 farmers among the 462,080 acres here, served mainly by the town of Gooding, the county seat of 2,800 persons. This year one of the county's main features is a 600-acre farm called "France, Incorporated"—the home of National FFA Secretary Vern France.

This beef and crop operation three miles north of town has been home to Vern ever since he can remember—all of his 21 years, as a matter of fact. It was from this farm that his father, Earl, helped establish the first vo-ag course at Gooding High School. And it was here that Vern started his agricultural pursuits that led him to national acclaim within the FFA.

It all started back in the fall of 1956, when the stocky, blond farmer's son came to Advisor Lester Diehl to enroll in vo-ag. He had four beef animals then, and a promise to put out crops the following spring. Vern dug in with the initiative that has characterized him since, and began to expand both beef and his hay and grain crops. By graduation time in the spring of 1960, he had a gross income of over $31,400. And so well thought of was this enterprising young farmer that he was awarded his high school's "Most Valuable Citizen Award."

While Vern was still in high school, his father and three brothers formed the home farm into a corporation and issued shares of stock within the family. "France, Incorporated," was born, but Vern was too young to join his older brothers then. With high school graduation, however, he took hard-earned cash from his supervised farming program and purchased 100 shares of the family stock. This amount gave Vern 10 percent ownership of the corporation and an active vote in its operation.

In the summer after high school, Vern worked closely with the home farm. Evenings after the work was finished, the stockholders gathered in the farm home to discuss work for the following day. Important problems were brought to a vote during those evenings with each member voting according to the amount of stock he owned. Further education also occupied his mind that summer, and he applied to the University of Idaho for admittance in the fall. Vern's love was livestock, and animal science became his endeavor.

But college wasn't long in Vern's budding career. The following summer the Idaho FFA Convention elected him state president, and he was off for a year of elected FFA office around the state. This was followed by the acceptance of his American Farmer application and election to national office at the 1962 National Convention.

Still a farmer at heart, Vern never lost his close contact with France, Incorporated, back in Idaho. Though this past year his travels have taken him several times around the country, he still flies back to the farm at every opportunity.

On a recent between-trips period, he

The farm truck becomes a traveling office for Vern while working on the farm. Feed mixer is at right, rear.

escorted a local Idaho agricultural leader around the operation with all of the old enthusiasm. There are now 1,500 feeder cattle in drylot. Over 200 acres of irrigated cropland and 400 acres of rangeland make up the farm corporation. His excitement became apparent when he demonstrated their newly developed feed mill just recently installed. The unit chops hay, rolls grain, mixes the two together, adds supplement, and augers it out to a truck or feed bin. "We've gotten over three pounds of gain per day with it," he told the agriculturalist.

"I want to fit somewhere into the agricultural picture," Vern recently told a visitor to the family farm. For him this may be a two-year tour with the Peace Corps or a return to college, both of which hold equal interest with him now. Whatever his choice, folks around Gooding will be hearing more about the youngest of the France boys.

Come visit with these national FFA officers on their farms from Massachusetts to the California coast line.

By Paul Weller

IT HAS been an event-filled year for your national vice presidents and one they will never forget. They follow a fast pace, but we corralled them long enough to get a story.

Between them they had 16 years of experience as FFA officers before being elected to a national office last fall. Their leadership activities would fill several pages, and their farming programs are the equal of many adult farmers.

The National Convention in October will bring their term of office to a close. They are Richard Mottolo, Andover, Massachusetts; Larry Whittington, Angier, North Carolina; Duane Leach, Winnebago, Minnesota; and Jerry Diefenderfer, San Luis Obispo, California.

Dick Mottolo is a New Englander from his accent to the never-tiring energy he displays from one tight schedule to another. Unlike the other national officers, Dick was not raised on a farm. He grew up in the semiurban community of Andover, where he lives today.

This fact had little bearing on his desire to farm, however. When he was 12 years old, he began getting odd jobs on neighboring farms after school. In the fall of 1956, he entered Essex County Agricultural High School and satisfied the school's vocational requirement by working on a large vegetable farm near his home. The following summers, the blond Future Farmer went north to Vermont, working on several dairy farms there for experience. During the summers of 1958 and 1959, he worked a total of 3,600 hours on placement alone.

Then in 1959, Dick's parents bought a small piece of land near town, and he started to raise hogs, calves, and vegetables on his own. Today, with jobs on 11 different farms in three states behind him, Dick proved beyond a doubt that a willingness to work could overcome a nonfarm handicap.

Packing virus-free berry plants was one of Dick's many placement experiences.

He earned an associate degree in animal science from the Stockbridge School of Agriculture last June, then put away his machinery to become herdsman and co-manager of a 95-head commercial dairy farm. National office put an end to this job, but Dick kept some hay and swine projects operating between travels for the FFA this past year. "Don't hesitate in asking veteran farmers for advice," is Dick's thought to other Future Farmers. Where will he be after his term is completed? Back to raising hay and hogs on a rented farm in his native state.

Larry Whittington's dry, southern humor gives him away as the North Carolina tobacco farmer that he is. Raised on a tobacco and grain farm in the east-central section of the state, he started on the road to farming with two sows from the Benson FFA Chapter's pig chain. Borrowing money and using his profits, Larry expanded to more than 40 hogs in addition to his corn, soybeans, and truck crops.

Entering into a father-son partnership in 1959, when his father became too ill to farm, the Future Farmer took over the entire farm on a 50-50 basis. Not to be kept down with these responsibilities, Larry served a total of five terms as officer on the local, area, and state FFA levels. You can count more than 20 leadership activities on his record, ranging from a member of the high school band to being Star Farmer of his FFA chapter.

The occasional free periods in his busy schedule find Larry flying back to the farm to check on crops and livestock. He bought a small tract of land recently to add to the home farm's acreage. Ask him about his tobacco crop—he'll tell you in his slow North Carolina drawl that it takes nearly 2,500 pounds of fertilizer per acre for his crop. Then it must be harvested by hand, taking from five to seven weeks to complete.

But the home farm holds a prominent place in Vice President Larry's heart. He's going back there in October with his personal motto: "Aim high; do your best; you can't lose."

No FFA travel orders today! Then it's back to the tobacco barns for Larry.

Your National FFA Vice Presidents

Checking the year's corn crop with his dad and training his Hampshires to show are two of Duane's pet farming activities.

Good clean grain from his 3,500 acres of dryland wheat catches Jerry's eye.

With Jerry's fleet of machinery, maintenance becomes a necessary function.

Jerry Diefenderfer has the largest farming operation of all the national officers. On his shoulders rest the major responsibilities for 9,000 acres of his Grandmother King's ranch on California's Carissa Plains. Introduction to large-scale farming came early to Jerry, son of a National Guard Lieutenant Colonel in the central California college town of San Luis Obispo.

He was only 15 when his grandfather died, and his grandmother asked him to help manage the huge dryland wheat and beef operation which lies some 50 miles from Jerry's home. It meant taking responsibility for $80,000 of farm machinery, 125 cows and calves, 3,500 acres of wheat, 135 acres of irrigated alfalfa, and another 100 acres of irrigated grains, but Jerry accepted the challenge.

After a term as president of the California FFA Association, Jerry was named to national office last fall. The ranch duties and his state office didn't keep Jerry from maintaining his academic average at Cal Poly College, though, and at the end of his freshman year last spring, he had a 3.2 grade average. Now it will be back to college and more busy weekends at the King Ranch for Jerry when he steps down after the National Convention.

It takes leadership, initiative, and lots of hard work to be a national officer, but the door is open to all Future Farmers who possess that extra spark. Why not set your sights on this honored goal?

Duane Leach was elected to a national office from a livestock farm in southern Minnesota, after three years of experience as an FFA officer. Duane tells the visitor how he started his farming program at the tender age of eight when his father gave him a heifer calf. It wasn't long before the heifer was in the family herd and Duane was in business.

From the heifer he went to sheep and hogs, later entering into a partnership with his father with the more than 140 feeder pigs and breeding stock. During this time, Duane participated in more than a score of FFA and community leadership activities. He and his father cooperate in the soil and water management program and built a lake on the farm for wildlife habitat.

Dropping out of the University of Minnesota for a year to fulfill his duties as a national officer, Duane used the free time from trips to build his swine herd. He and his father even started a sizable herd of Shetland ponies for sale to surrounding residents.

The soft-spoken officer started his swine enterprise with a litter of pigs where all but four died, and now has customers return year after year to buy breeding stock. The well-kept farm near Winnebago shows the hard work and interest that Duane has helped put into it. He'll be heading back to college after his duties expire this October.

Planting The Green Bounty

More than half a million seedlings now grow in this community through help of FFA chapters.

TEAMS OF Future Farmers headed their tractors into the fields of central Minnesota this past spring and left a green trail of trees as their investment in the future. Tree planting season in this area just east of the Twin Cities brings Future Farmers and millions of conifer seedlings together as farmland is put back to producing forest products.

In the midst of the busy area is Stillwater Chapter, one of several taking part in the Minnesota conservation work. A workday starts early for the teams of tree planters, and it's not uncommon to find Advisor Ray Erwin supervising work at 6 a.m. on a brisk April morning. Planting is done with FFA teams consisting of one member on the tractor and two more on the seedling transplanter. The Stillwater Future Farmers have planted their way through farmers' fields at the rate of 1,000 trees per hour, spacing seedlings five feet apart.

Advisor Erwin stopped momentarily this past spring after his members planted a record 254,900 trees and figured that over 606,000 trees in his school district could be accounted to his chapter members. Significantly, that quarter of a million trees planted this spring was the result of over 1,000 hours of FFA participation. And most important, scores of farmers in the community now have a valuable cash crop growing on their marginal land.

The story of Stillwater's tree planting activity goes back four seasons ago when a local banker, Bob Hagen, offered to loan the chapter $400 to buy a tree planter. The members accepted the offer, bought the used planter, and approached John Kunz of the farm service store for a tractor. John gladly loaned one for the 1960 tree planting season, and the members were in business.

But even before the Future Farmers bought their planter, tree planting had become an annual affair in their semi-suburban community. Farmers and landowners were anxious to improve their land with nursery-raised trees planted on land qualified under the Agricultural Conservation Program. The only thing lacking was capable help to plant the endless rows of seedlings. It was here that the FFA members moved in to fill the gap.

Chapter members sat down to work out a program that would benefit both farmers and Future Farmers involved. It was decided to charge $10 per thousand to plant trees which the farmer got from the state conservation department for an additional $10 per thousand. While the planted trees represent a $20 per thousand investment to the farmer, the ACP reimburses him $17.50 per thousand of planted trees. So Stillwater area farmers were getting their tress planted for about a quarter of a cent, and FFA members were embarking on another fund-raising community-service activity.

Word of the program spread and local farmers contacted the chapter to request that trees be planted on their farms on a custom basis. Advisor Erwin organized teams of three members to work the planter on a rotating plan. So successful was the venture that it didn't confine itself to trees alone. Two seasons later, in 1962, a farmer asked that the chapter plant 4,000 strawberry plants in his truck patch. And this past spring Stillwater members rented out their planter for another farmer to transplant chrysanthemums.

This season the chapter paid off the mortgage on a new tractor and the tree planter and purchased a granular herbicide applicator that attaches to the rear of the planter. This now enables a farmer to request Future Farmers to spread an 18-inch band of herbicide around the trees as they are planted. The extra cost of $1 per thousand of trees planted, plus 30 cents a pound for the chemical, is well worth the labor saved from weeding.

For the weeks during April and May that spelled tree planting season this year, two Future Farmer teams operated continuously, sometimes from 6 a.m. until as late as 8 p.m. daily. Each three-member team had a tractor and tree planter. Regular team rotations limited the amount of classwork a team member missed, and no member missed more than a day a week. From earnings, the chapter paid each member a salary. The wage rate began at 45 cents an hour, then increased 5 cents an hour for each 10 hours of experience. And time and a half was paid for any work done on weekends. Future Farmers even went 30 miles north to get the patrons' trees at the state nursery. Altogether, 45 members took part in the huge effort before the quarter-million trees were planted.

The countless acres of pines and spruces growing in their neat rows in the Stillwater community are the end result of another FFA-sponsored service. In another generation when the fruits of the Future Farmers' labors are harvested, many Americans will benefit from the forest products. As for now, it has already paid a return in chapter-owned equipment, wages, partial expenses for five members to Europe, and a community full of grateful farmers.

FUTURE FARMERS

EARN AND LEARN
WITH KOPPERS

FENCEPOST JAMBOREE

DO NOT
DISTURB
TIL AFTER
2004 A.D.

KOPPERS
CS 235-61

FENCE

FOR LIFE WITH
KOPPERS 40-YEAR
FENCE POSTS

Planting The Green Bounty

More than
this comm

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SELL FENCE POSTS BY THE CARLOAD!

Here's the most exciting and unusual fund-raising program ever devised—one with real *earning* and *learning* power! And it all revolves around *FencePost Jamboree* from Koppers Company, Inc. Here's what FencePost Jamboree offers your chapter: ☐ SALE of an actual farm material—Koppers 40-Year Pressure-Creosoted Fence Posts—a quality product that is *in-demand* on U. S. farms . . . where more than 45-million posts are set each year. (See adjoining Koppers brochure) ☐ PROFIT of up to 30% on every carload of posts sold. ☐ EDUCATIONAL TRAINING for members on pressure-treated wood . . . techniques of better fencing . . . finance . . . selling . . . material handling . . . sales promotion. ☐ READY-MADE ADVERTISING & SALES PROMOTION KIT that includes free ad mats; radio, TV and theater commercials, news releases and displays—plus the colorful "Fence for Life" brochure that adjoins this card. ☐ COMPLETE ORGANIZING INSTRUCTIONS—the program is quickly and easily set-up in your chapter. So get Facts & Figures on dynamic FencePost Jamboree. Complete and mail card . . . *now!*

FENCE

FOR LIFE WITH

KOPPERS 40-YEAR

FENCE POSTS

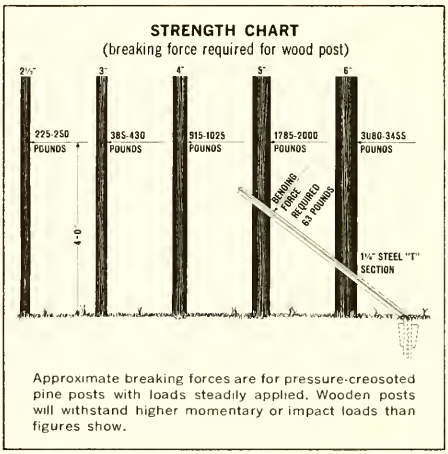
DO NOT
DISTURB
'TIL AFTER
2004 A.D.

this sign is like a dividend check to you. It means money saved. It means your farm actually has greater value. And it means a financially *sounder* farm in future years. This sign symbolizes the 40-year (and longer) service you can count on with Koppers pressure-creosoted posts.

pressure-treatment with creosote guards against post failure

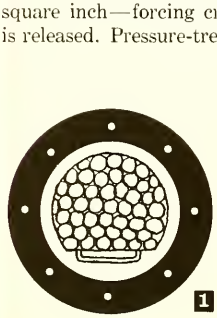
Pound-for-pound, no other material can match wood for strength and economy. With the added defense of pressure-creosote treatment, wood takes on a special new value: lifetime protection against termites, decay and acidic soil conditions. This strength and enduring service life are primary reasons why Koppers 40-Year Posts are your best fencing investment. Koppers pressure-treated posts will not fail due to rusting, corroding and crumbling. Dipped or painted posts give only surface protection. Compared to untreated or dipped posts, Koppers creosote-treated posts will last a full *six to eight times longer.*

Check the strength of the posts you need with the chart. Use it as a guide when ordering Koppers 40-Year Posts.



Approximate breaking forces are for pressure-creosoted pine posts with loads steadily applied. Wooden posts will withstand higher momentary or impact loads than figures show.

this is pressure-creosoting Pressure-treating by Koppers is an intricate science. Briefly, this is how your posts are preserved. **1** Green posts are machine peeled, carefully inspected, seasoned, then loaded into tram cars and placed in a pressure cylinder. The door is hermetically sealed and air under high pressure is pumped into the cylinder. **2** Preservative solution is piped into cylinder and air pressure is increased to 175 pounds per square inch—forcing creosote deep into wood cells. **3** After deep penetration, pressure is released. Pressure-treated posts are removed ready for 40 or more years of service life.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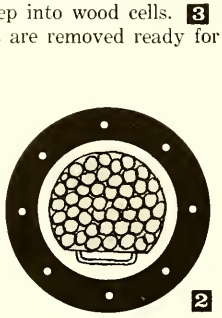
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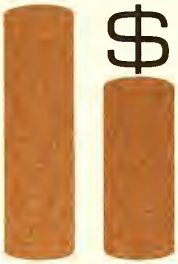
3

KOPPERS CS 235-61

Koppers 40-year pressure-creosoted fence posts

. . . save you money Fence lines represent a large part of your farm investment. Protect this investment with Koppers posts that are pressure-creosoted to last more than 40 years. *That's roughly eight times the life expectancy of untreated posts,* and three to four times longer than commonly used steel posts. Savings in replacement costs over the years will more than pay for your original Koppers 40-Year Posts. In addition, strong wood fencing will take the roughest abuse of livestock. Koppers posts will stand many times the force that will bend steel fence posts.

COMPARATIVE ANNUAL COSTS* PER FENCE POST



UNTREATED POSTS: Total cost of 50¢ per post divided by expected life of 5 years equals 10¢ per year cost.

KOPPERS PRESSURE CREOSOTED POSTS: Total cost of 90¢ per post divided by expected life of 40 years equals 2¼¢ per year cost.

YOU SAVE APPROXIMATELY 16½¢ A YEAR PER POST BY USING KOPPERS 40-YEAR POSTS!

**Costs are average and will vary in certain sections of the country.*

save you work Koppers 40-Year Posts save you time in many ways. By using Koppers posts, you build your fence only once. By comparsion, with untreated posts you might cut or buy . . . haul . . . dig . . . set . . . and attach your wires five to eight times during the life of a single Koppers 40-Year Post line. With Koppers posts there's no maintenance or repairs due to termites and fungi . . . periodic inspections are unnecessary. You have more time for recreational activities or to just simply take it easy with the family.

give you better fencing Koppers posts set 40 and 50 years ago continue to protect livestock . . . form solid boundary lines . . . prevent unnecessary crop damage . . . and promote overall farm appearance and value.

KOPPERS CS 235-61

a good fence is many things Strong, straight fences are a mark of your pride and ability as a farmer. With Koppers 40-Year Pressure-Creosoted Fence Posts, you can build a fence that has these values: creosote-impregnated to resist termite and fungi attack for 40 years—and more . . . great strength, can withstand many times the force that would buckle and flatten ordinary steel posts. ■ Build a better fence with Koppers 40-Year Posts . . . and the American Society of Agricultural Engineers specifications for farm fence construction that are reprinted below.

ASAE recommendation: specifications for farm fence construction

These specifications are intended merely to serve as a guide for economical construction of fences bordering highways and for general farm use. They are based on the best technical information and experience available. The specifications that follow apply only to materials and methods of construction.

1. END-POST AND CORNER POST ASSEMBLIES

A. With wood End-Post assemblies, the end-post shall have a 5-in. minimum top diameter and a minimum length of 8 ft. The first brace post shall have a 5-in. minimum top diameter, and the second brace post shall be of 4-in. minimum top diameter. The lengths of the brace posts shall also be a minimum of 8 ft.

The wood end-post shall be set in the ground a minimum of 42 in. The post may be either hand set or set with a post driver. If hand set, the post shall be placed near the center of the post hole and the backfill thoroughly tamped. If power driven, the post shall be machine sharpened to a dull point.

The brace posts shall be spaced to accommodate a minimum brace length of 8 ft, and set a minimum of 42 in. in the ground. The brace posts may also be hand set or set with a post driver. The above specifications pertaining to end-post setting shall also apply to setting brace posts.

The wood brace shall be placed horizontally 12 in. below the top of the wood posts. The horizontal braces between the posts made of wood shall be of 3½-in. minimum top diameter or 3½ in. square and a minimum length of 8 ft. The method of connection between the horizontal brace and the posts shall be of dowel-pin construction. A ⅜ x 4-in. steel dowel shall be used, extending 2 in. into the brace and 2 in. into the post **(Detail 1)**. Four strands of No. 9 galvanized brace wire shall extend from 4 in. above the ground line on the end-post to 4 in. below the top of the first brace post. The wire shall be stapled to each post and spliced, in accordance with **(Detail 2)**. The second brace wire shall extend from 4 in. below the top of the second brace post.

B. Wood pull-post assemblies shall consist of three posts. The center post shall have the same specifications as an end-post. The other posts shall have the specifications of first brace posts **(Detail 3)**.

Placement of the wire shall be as follows: Two sets of brace wires shall extend from the center post to each end brace post, one extending from 4 in. below the top of the center post to 4 in. above the bottom of each end brace post, and the second extending from 4 in. above the bottom of the center post to 4 in. below the top of each end brace post. The brace wires thus form an "X" in both spans to provide resistance to tension from either direction.

The brace wires shall be 4 strands of No. 9 galvanized wire and twisted with a ¼ x 1 in. steel slat or ⅜-in. round rod until the assembly is rigid. Leave slat or rod in position.

2. LINE POSTS

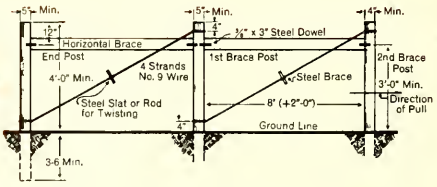
A. Straight Fence

1. Wood Line Posts

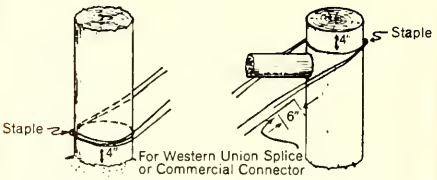
Pressure-treated wood posts shall have a minimum top diameter of 3 in. and shall be a minimum of 6½ ft. in length for construction of straight, open-field fencing in all soils other than muck, peat or standing-water conditions. Spacing of the posts shall be a maximum of 14 ft. measured horizontally and the posts shall be set in the ground a minimum of 2 ft. Posts set in muck, peat or soils on which water stands should be 8 ft. long, and set at least 3½ ft. in the ground.

3. WOOD POST TREATMENT

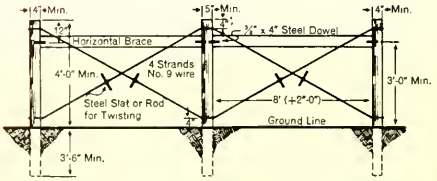
All wood posts and braces shall be pressure-treated according to Federal Specification TT-W-571c, June 7, 1950, or latest revision. General Services Administration, Business Service Center Region 3, 7th and D St., S.W., Washington 25, D.C.



DETAIL 1. Wood posts with diagonal steel braces



DETAIL 2. Details of diagonal wire bracing



DETAIL 3. Wood Pull-post assembly

KOPPERS®

KOPPERS COMPANY, INC.
FOREST PRODUCTS DIVISION
750 Koppers Building
Pittsburgh, Pa. 15219

Fiction by
Neal Neitzel

MAIL CARD
FOR COMPLETE
"FACTS AND FIGURES"
ON KOPPERS
FENCEPOST
JAMBOREE

YES...
SEND THE TABLE-TOP PRESENTATION "FACTS & FIGURES" ON FENCEPOST JAMBOREE... DESIGNED SO THAT MANY CHAPTER MEMBERS CAN REVIEW AND DISCUSS THIS UNIQUE PROGRAM AT ONE TIME.

NAME
TITLE
CHAPTER
ADDRESS
CITY
COUNTY
ZONE
STATE

feet in surprise. "Me? Me?

"Don't forget to report in to the referee," Coach Meyers reminded.

Dan Rodgers poked the lanky senior lightly on the shoulder. "Come on, Charlie!" he urged, trotting towards the field. "This is our chance to be heroes!"

"My folks drove up here to Fairview to see this game," Charlie said, keeping pace. "I told them there wasn't much chance I'd even play—unless the coach sent me in for a few minutes so I could earn my letter. Will they ever be excited!"

Charlie ran with a slight limping gait. He'd had polio during his freshman year, but thanks to his faith and to the prayers and encouragement of his family and friends, here he was, loping across the field to report to the referee.

"Purvis in for Sawyer!" he cried, then whirled and lined up with Dan and the rest of the Baxter High team to await Fairview's kick-off.

"Easy does it, Charlie," said Dan, noticing his friend's tense nervousness. "You'll be okay when the action begins."

His softly spoken advice brought a halfback.

Dan wished he could follow his own suggestion. As he stood watching the Fairview team line up in kicking formation, his throat was dry and his stomach muscles were tight knots.

He knew that if Ralph Chase had been in there at fullback, the good-looking blond junior would be completely relaxed and confident, sparking the others. That's what was missing, all right. Without that spark, Baxter High's team was about to begin the final half on the losing end of a 12-0 score.

Dan, also a junior, played solid, dependable football, but he was the first to admit that he lacked Ralph's blazing speed and colorful style of play. Before being shifted to the fullback's position, Dan had seen action in almost every other spot on the team.

"You're our secret weapon," Coach Meyers had once jokingly told him. "You go in wherever we need strength, and you do a good job."

The football soared through the bright sunshine in a high, end-over-end arc. Bill Schultz, the Baxter quarterback, caught the ball on the 15-yard

an charged on ahead of the wiry quarterback as did Charlie Purvis, to provide interference. Dan veered to his left and lowered his shoulders to ram into an onrushing Fairview tackler.

Getting to his feet, Dan saw that Bill Schultz had succeeded in returning the ball to the 30-yard stripe. "Nice going, Bill!" he yelled, jogging towards the group of Baxter players.

"He'd have gone even farther if I hadn't been in his way," Charlie Purvis muttered. "I'm too slow. Sorry, Bill."

"Forget it," said the quarterback, closing the huddle. He called for an end run. Pete Walters, the slim, red-haired left halfback, took the hand-off and spun through a hole around left end, picking up six yards.

Then a delayed reverse play netted them three yards, and a line plunge through center gave them a first down. Dan Rodgers tried it through center again a few plays later, and managed to move the ball past the mid-field marker and up to Fairview's 41 before he was nailed.

"Now we're rolling!" he panted.

(Continued on Page 44)

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1. END-POS

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BUSINESS REPLY MAIL

No Postage Stamp Necessary if Mailed in the United States

POSTAGE WILL BE PAID BY

FARM YOUTH ACTIVITIES
Koppers Company, Inc.
750 Koppers Building
Pittsburgh, Pa. 15219

ATT: DIRECTOR, FYA

FIRST CLASS
PERMIT NO. 1046
PITTSBURGH, PA.

QUESTIONS & ANSWERS
ABOUT FENCEPOST JAMBOREE

Q. How many fence posts make up a carload?
A. 2,000 line fence posts or a combination of line, anchor and corner post assemblies totaling 40,000 lbs.

Q. What financing must my chapter do?
A. After Chapter Sales Teams acquire enough customer orders to equal a full carload, the Chapter will purchase this carload order through the local Koppers distributor.

Q. How is this financing accomplished?
A. Often your Chapter treasury will handle this carload purchase of fence posts. In other cases, a short-term loan can be made from your local bank.

Q. How can farmers save **money** with Koppers 40-Year Posts?
A. Koppers Posts pay for themselves...often several times over! See Page 3 of adjoining Koppers ad for the story.

Q. Just what is the pressure-creosoting treatment of posts?
A. A scientific process that puts at least 40-years service life in every fence post. See page 2 of adjoining Koppers ad.

Q. Why are Koppers Posts better than ordinary steel posts?
A. Koppers Posts are stronger . . . also won't rust or corrode. See Page 2 of adjoining Koppers ad for details.

"FencePost Jamboree is an 'Earn and Learn' Fund Raising Program developed for the Future Farmers of America by Koppers Company, Inc."

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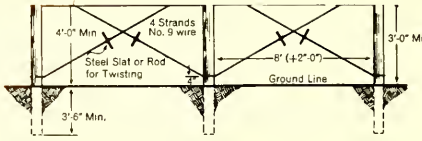


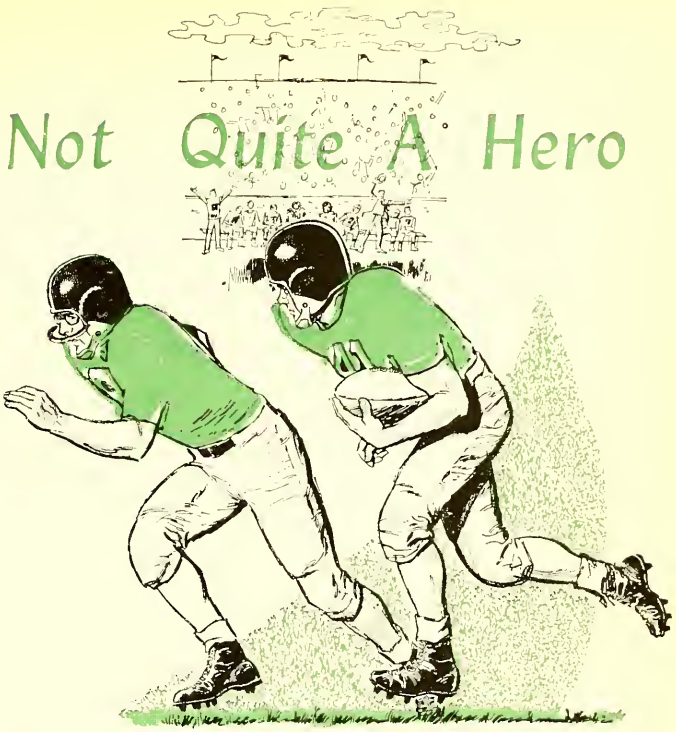
DETAIL 3. Wood Pull-post assembly

KOPPERS®

KOPPERS COMPANY, INC.
FOREST PRODUCTS DIVISION
750 Koppers Building
Pittsburgh, Pa. 15219

Fiction by
Neal Neitzel

Not Quite A Hero



Dan glanced to his right, noting Charlie Purvis galloping along abreast. Charlie's lips were set with determination.

"IT ISN'T the Fairview team that's beating you," Coach Meyers said quietly. His brown eyes studied the battered, spiritless group of young men in the locker room. "This game was lost three days ago."

Three days before was when Baxter High's star fullback, Ralph Chase, had sprained an ankle during scrimmage.

Dan Rodgers, who was moved into the vacant slot, nodded glumly. "So far we've played like a bunch of zombies," he said angrily. "If I hadn't missed that tackle just before the half ended, Fairview wouldn't have scored."

"Forget that, Dan. You're the only man who's playing decent football this afternoon," said the coach. Then he directed his attention to the far corner of the room, where a rangy blond youth sat slumped on a bench. "How do you feel, George?" he asked.

The team's right halfback attempted a feeble smile. "Not too good," he admitted. His features were pale and the smile didn't conceal the wince of pain that appeared when he tried to sit up straight.

"It's time to get back on the field," said one of the stripe-shirted officials, sticking his head inside the locker room.

"You stay here and rest," the coach instructed the ailing right halfback. "I'll put in a call for the doctor. Charlie, you go in to replace George."

Charlie Purvis, a tall, bespectacled senior, almost stumbled over his own feet in surprise. "Me? Me?"

"Don't forget to report in to the referee," Coach Meyers reminded.

Dan Rodgers poked the lanky senior lightly on the shoulder. "Come on, Charlie!" he urged, trotting towards the field. "This is our chance to be heroes!"

"My folks drove up here to Fairview to see this game," Charlie said, keeping pace. "I told them there wasn't much chance I'd even play—unless the coach sent me in for a few minutes so I could earn my letter. Will they ever be excited!"

Charlie ran with a slight limping gait. He'd had polio during his freshman year, but thanks to his faith and to the prayers and encouragement of his family and friends, here he was, loping across the field to report to the referee.

"Purvis in for Sawyer!" he cried, then whirled and lined up with Dan and the rest of the Baxter High team to await Fairview's kick-off.

"Easy does it, Charlie," said Dan, noticing his friend's tense nervousness. "You'll be okay when the action begins."

His softly spoken advice brought a grateful glance from the jittery right halfback.

Dan wished he could follow his own suggestion. As he stood watching the Fairview team line up in kicking formation, his throat was dry and his stomach muscles were tight knots.

He knew that if Ralph Chase had been in there at fullback, the good-looking blond junior would be completely relaxed and confident, sparking the others. That's what was missing, all right. Without that spark, Baxter High's team was about to begin the final half on the losing end of a 12-0 score.

Dan, also a junior, played solid, dependable football, but he was the first to admit that he lacked Ralph's blazing speed and colorful style of play. Before being shifted to the fullback's position, Dan had seen action in almost every other spot on the team.

"You're our secret weapon," Coach Meyers had once jokingly told him. "You go in wherever we need strength, and you do a good job."

The football soared through the bright sunshine in a high, end-over-end arc. Bill Schultz, the Baxter quarterback, caught the ball on the 15-yard line and started upfield. Dan charged on ahead of the wiry quarterback as did Charlie Purvis, to provide interference. Dan veered to his left and lowered his shoulders to ram into an onrushing Fairview tackler.

Getting to his feet, Dan saw that Bill Schultz had succeeded in returning the ball to the 30-yard stripe. "Nice going, Bill!" he yelled, jogging towards the group of Baxter players.

"He'd have gone even farther if I hadn't been in his way," Charlie Purvis muttered. "I'm too slow. Sorry, Bill."

"Forget it," said the quarterback, closing the huddle. He called for an end run. Pete Walters, the slim, red-haired left halfback, took the handoff and spun through a hole around left end, picking up six yards.

Then a delayed reverse play netted them three yards, and a line plunge through center gave them a first down. Dan Rodgers tried it through center again a few plays later, and managed to move the ball past the mid-field marker and up to Fairview's 41 before he was nailed.

"Now we're rolling!" he panted.

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Not Quite a Hero

(Continued from Page 43)

banging his big hands together as he loped back to the huddle.

"All the way this time," Bill Schultz said, grinning at his teammates. He called for a long pass play and the team, encouraged, moved briskly into their positions. At the snap from center, Pete Walters and Charlie Purvis sped downfield.

As Bill evaded one Fairview lineman, Dan was very busy, fending off two other eager would-be tacklers. Finally, seeing that Charlie Purvis was temporarily in the clear, Bill cocked his arm and threw.

Dan turned in time to see the football glance off the bespectacled senior's outstretched hands. It came down in the arms of the Fairview back assigned to guard Charlie. Evading Charlie's frantic lunge, he whirled and ran the interception back almost to mid-field before a pair of desperate Baxter players hauled him down.

Shoulders slumped, Bill Schultz signaled the official for a time-out period. The Baxter team gathered morosely in a circle near the scrimmage line. "Well, it was fun while it lasted," growled Ted Gerbenski, the chunky black-haired center. "For a few minutes there, I thought we'd remembered how to play football again."

"My fault," muttered Charlie Purvis. He kicked savagely at the turf, twisting to look towards the sidelines as if expecting to see a replacement coming in. "This wouldn't have happened if George Sawyer were in here instead of me. If I hadn't muffed that easy catch, we'd have scored."

"Let's try to hold them, at least. Keep them from racking up any more touchdowns," Bill Schultz said tonelessly.

"But think of the money you'll save! With grades like mine, what college would ever take me?"

Dan was as discouraged as anyone, but the dejected, defeated attitudes of his teammates angered him. He was determined to keep on trying. "We can do better than that!" he said loudly, his jaw muscles set. "We can take the ball away from them—yes, and we can still win this game! A couple of measly touchdowns and one extra point is all we need."

Ted Gerbenski's wide forehead wrinkled in a scowl. He stared up at Dan. Then he nodded slowly, a wink and a grin brightening his face. "Yeah. Yeah, now that you put it that way, maybe we can."

"What have we got to lose by trying?" said one of the other linemen. Bill Schultz caught fire, too. He stood up quickly. "Dan's right. All we need is a couple of touchdowns. Let's get to work!"

The newly inspired team trotted purposefully to the line of scrimmage. Fairview players exchanged puzzled glances and shrugs, seeing the unexpected display of spirit and energy.

"Hey, you characters are losing!" muttered a Fairview guard. "Or, did you forget?"

Baxter's answer came in the form of a mighty charge as the ball was snapped. Dan Rodgers shoved his way through the line and hit the opposing fullback in a bone-jarring tackle before that unfortunate young man had even had time to tuck the pigskin beneath his arm.

The ball tumbled and rolled towards the sidelines but was immediately pounced on by a triumphant Baxter right tackle. Dave Ebert chuckled happily as he handed the captured ball to the referee. "They took it away from us, so now we take it away from them!" he explained, brushing dust from his green jersey.

While Fairview was still dazed and bewildered, Bill Schultz called for the quick opener play. Without even barking signals, the ball came back to Dan. Dan galloped through a huge hole in the right side of the line and was nearly through the secondary defenses before anyone knew what was happening. Two Fairview backs managed to drop him, but the play had gone for 30 yards.

They were on the 12-yard line. Bill Schultz grinned at Dan. "Let's try that fake center plunge play," he whispered crisply. "Pete will carry. All the way this time!"

At the snap from center, Bill pretended to hand off to Dan. Dan lowered his head and rammed the center of the line. He was buried beneath an avalanche of Fairview players just beyond the line of scrimmage, but from his cramped position at the bottom of the pile, he heard the jubilant cheers of the crowd. He knew that Pete Walters had scored.

"May I use your phone?"

The kick was a beauty, sailing nicely over the crossbars. Fairview 12, Baxter 7. The clock on the scoreboard showed that the game was going into the final quarter.

From then on, it was a seesaw battle. Fairview managed to keep possession of the ball while the minutes ticked away, although they couldn't score. Finally, on fourth down, with the ball on Baxter's 30, the Fairview quarterback punted. The football went out of bounds on the Baxter three-yard line.

Baxter, fighting hard, marched the pigskin steadily downfield by using a series of safe, simple running plays. When they reached their opponents' 19-yard line, however, Fairview stiffened. The next play netted a three-yard loss, and the play after that went for no gain.

"Let's try it around right end," Bill Schultz muttered in the huddle, breathing hard. "You lead the way, Dan."

They trotted into position. The ball came back from center as the two lines slammed together. Bill Schultz dropped behind Dan as the backfield swung to the right. Unfortunately, a big Fairview guard shook off Charlie Purvis' blocking attempt and sliced into the play from the side. His unexpected jarring tackle bounced the ball out of the quarterback's arm, and Fairview recovered.

"After the way I've messed things up this afternoon, guess I'll look for a hole I can crawl into," Charlie Purvis groaned, shaking his head. "I know I'm not as bad as I've looked today, Dan. Guess you'll have to be the hero. I'll be satisfied if I can finish out the game without doing any more damage."

There wasn't time to talk, then. Fairview had possession of the ball, and as the minutes ticked past, it was obvious to everyone that they intended to stall, to hang onto the ball so that Baxter wouldn't have another opportunity to score.

(Continued on Page 46)

"You just can't run a modern operation like this without telephones"

Rene Johnson manages a 375-acre dairy farm near Trappe, Maryland. His total herd of 350 Holsteins keeps him and four men busy from daylight to dark.

To keep things running smoothly, Rene makes good use of his extension phones. He has one extension in the machine shop and another in his office adjoining the milkroom. With these two phones and the main station in the house, Rene is seldom out of reach. He takes and makes about fifteen calls a day on the average.

"I wouldn't want to farm this place without these phones," Rene told us. "I'd have to do too much chasing. It's not actually a matter of choice—you just can't run a modern operation like this without telephones."

Each year more farmers are finding that the one-phone farm has seen its day. They know it's a lot cheaper to run the telephone to the man, than the man to the telephone.

You can find out how little an extension phone costs by calling your telephone business office.

. . . . .

If you want an all-around communications system, Farm Interphone is the answer. It gives you on-the-farm communications between strategically located Interphone stations. You can also make or take regular outside calls from any of these telephones.

Bell Telephone System

Not Quite a Hero

(Continued from Page 44)

Less than a minute remained, in fact, when they finally had to punt. Dan Rodgers gathered the ball in on his 12-yard line and galloped up to the 38 before a pair of tacklers hauled him to earth.

"They'll expect us to try a long pass play," Bill Schultz said in the huddle. "So, instead, it will be up to you, Dan. Right through the middle. We'll clear the way!"

Heads bobbed vigorously and the team raced to the line of scrimmage. Fairview noticed the formation and believed that Baxter was going to send the two halfbacks downfield for a pass. "Watch those two backs!" shouted the Fairview fullback as the ball was snapped.

Dan grabbed the hand-off from Bill Schultz. He spotted the welcome sight of a huge opening in the middle of the line. He plunged through, legs driving hard. A surprised Fairview linebacker dove at him, arms clutching at his waist. Dan twisted. The hands fell away.

Another would-be tackler slapped at him as he plowed through the secondary. Dan staggered, then wrenched free and kept going. He was going all the way! He knew it even as he saw the frantic Fairview safety angling to intercept him.

Dan glanced to his right, noting Charlie Purvis galloping along nearly abreast. Charlie's lips were set with determination. Dan knew how badly the tall slender senior youth felt about his earlier misplays, knew that Charlie wanted this game to be a special memory. Dan made a quick decision.

"Here, Charlie!" he yelled, causing his teammate to turn his head. "Catch!"

Charlie Purvis gathered in Dan's lateral, his blue eyes wide behind his glasses. He tucked the ball under his arm and plunged across the goal line while Dan neatly took out the Fairview safety with a clean block.

Dan got to his feet and gave the glum-looking Fairview player a boost just as the gun sounded, ending the game. He looked towards the goal line and saw a beaming, wonderfully excited Charlie Purvis being mobbed by teammates and fans. The lanky senior's face was flushed and his eyes were glowing as he was lifted off the ground and carried from the field.

A big hand came down on Dan's shoulder. He turned, looking into the good-natured, leathery features of Coach Meyers. "You're still my favorite secret weapon," the coach said as they walked slowly across the field. Dan felt good about the way things had turned out. In fact, the guy who was not quite a hero felt wonderful! ◆◆◆

NOW! MOTOR EASY TO BUILD SCOOT'R-BIKE FROM 26" BICYCLE FRAME

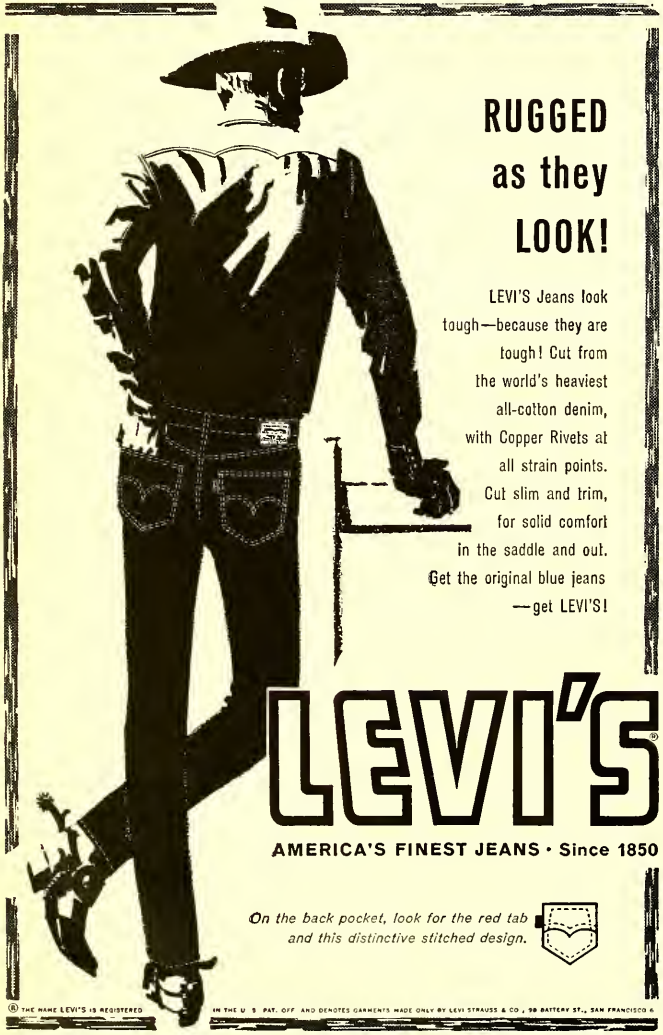
BIGGER, BETTER THAN A MINI-BIKE

SPEED BIKE TRAIL BIKE

SAVE $50 TO $100

Convert old bicycle frame for as little as $4.95, plus small welding job. Step-by-step PLANS, photos show you how. PLANS, $2.00 (refundable). Wheels, clutches, kits at Factory Discount Prices. Order Plans today.

GILLIOM MFG. CO., Dept. NFF-10, St. Charles, Mo.



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LEVI'S Jeans look tough—because they are tough! Cut from the world's heaviest all-cotton denim, with Copper Rivets at all strain points. Cut slim and trim, for solid comfort in the saddle and out. Get the original blue jeans —get LEVI'S!

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On the back pocket, look for the red tab and this distinctive stitched design.

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"Could I make a suggestion?"

99 out of 100 owners would recommend the

OLIVER 1600

to their neighbors

That's the big tractor news from a survey among the thousands of farmers who bought the new 1600 in time for spring work. (names on request)

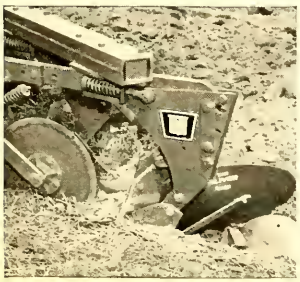
These owners have already discovered that this new Oliver tractor has a lot of power, is easy to handle. It drives like an automobile, even in tough 4-bottom plowing . . . and with 16-inch bottoms.

The quiet-running 6-cylinder engine—gasoline, diesel, or LP gas, pulls smoothly from full throttle down to less than half speed. And backing up the engine are 12 forward speeds with optional Hydra-Power drive. There's the right speed for each job, plus on-the-go shifting into underdrive for up to 36 per cent more tough-spot pull. (Potential drawbar pull in low gear goes up to 8400 pounds, according to results of a nationally-recognized tractor test.)

In the 1600, hydraulics are big, powered by a 16-gallons-per-minute pump that gives a fast lift to heaviest implements. And the draft-sensitive three-point hitch has a double feed-back system to prevent "wavy" implement depth.

Comfort hits a new high with 1600 fully-hydraulic power steering. It's fast, easy, and sure. The steering wheel itself tilts forward at a touch of your toe. Telescoping shaft lets it raise or lower to bring you new comfort, sitting or standing.

Try the new 1600 this fall. See the dramatic difference between this and ordinary tractors of the 4-5 plow class. Oliver Corporation, Chicago 6, Ill.



CUSHION-ACTION TRIP KEEPS YOU ROLLING

Newest time and money saver from Oliver leader in plow design, is the Cushion-Action trip. It spring-cushions bottoms against normal jolts; also provides share-saving trip action for big obstructions. Tripped bottoms move back and up without point dig-in or breakage. Available on new Oliver 361 and 362 mounted plows.

OLIVER

OLIVER

Look for this sign, new symbol of prompt, dependable service and genuine Oliver parts.

photo roundup

When members of the Liberty FFA Chapter, Washington, took this unwilling steer to the Spokane Junior Livestock Show, a news photographer snapped their picture, labeled "Power Steer-ing Helps."

Escalon, California's, clerk, John McCloud watches as FFA'ers Ozzie Berchtold and Bob Hammerquist demonstrate benches their chapter is donating to the city park as a community service.

Minnesota FFA President Dan Simones shows elementary school students at Lakeville how to milk a cow, while local chapter sweetheart, Lynn Storlie, helps. It was part of the FFA's contribution to Minnesota's Dairy Month activities.

Future Farmers were well represented at the 35th meeting of the American Institute of Cooperation in Lincoln, Nebraska. These members were among a record 1,800 for an evening banquet during the week-long series of events.

Kenny McMillan's home chapter of Bushnell-Prairie City met with business firms this year and had five billboards put up in Bushnell in Kenny's honor.

*Based on comparison with new tractor tires other than special purpose tires.

Super-Torque, Tufsyn—T.M.'s The Goodyear Tire & Rubber Company, Akron, Ohio

Only the Goodyear Super-Torque tire has "Angle-Braced" lugs to outpull all others in the field—outwear all others on the road

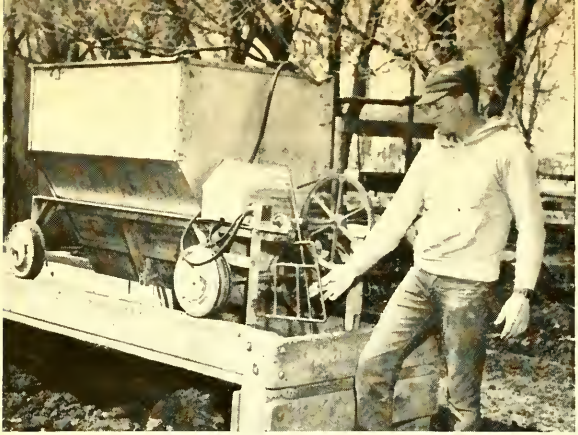
Super-Torque lugs are like corrugated steel—"Angle-Braced" to give you greater strength . . . more length . . . more pulling surfaces . . . more pulling power—all within the same space required for conventional lugs!

And, Super-Torque lugs are far wider . . . up to 34% deeper than standard lugs! Further, they're made with Tufsyn—toughest synthetic rubber in Goodyear's history—to not only outpull, but outwear all others!

Results: far better traction . . . less fuel consumption . . . longer tread life . . . and as much as 28% lower tire operating costs!

You're already paying for Super-Torque tractor tires anyway. Why not use them? For details, see your Goodyear Dealer or Goodyear Service Store!

GOODYEAR



This rod in Otto Geiger's right hand reverses the automatic feed wagon to return it as soon as it reaches the end of the feed bunk.

A Young Farmer With Ingenuity

Vo-ag farm mechanics training is paying off every day for this young farmer from Nebraska.

By Roy Alleman

WHEN Otto Geiger, young Nebraska farmer and former Future Farmer from the Cozad Chapter, needs equipment to make his work easier, he is apt to go to his shop and build it, incorporating many of his own ideas.

Recently, the Dawson County native hung a roller mill overhead in his new feed and grain handling system. He made steel rails, put four wheels on the mill, and now when he grinds feed for his cattle, he just rolls the mill under the grain spout. When he is through, he rolls it out of the way until next time.

His ingenuity, plus training and experience in vo-ag and FFA, paid off when he decided to switch to minimum tillage for raising corn. He made most of the equipment for the switch right in his shop.

However, the equipment of which he is proudest is his automatic cattle feeding system. Using most anything that was handy, he built a push-button steel cart that works perfectly. Most parts used in making it could be found around any average farm or junk yard. The wheels are auto brake drums, the levers are endgate rods, and the box is of sheet steel. It is powered by a one-horsepower electric motor.

"It holds 1,500 pounds of feed and cost me about $100," Otto said. "The electric motor was the most expensive part, but I don't think it needed one that heavy."

More specifically, this is the way Otto made the system: First, he laid a cement slab 80 feet long for the bunk to rest on. On top of this he built a conventional feed bunk, then added angle iron along the top of each side. This was to be the rails for his cart to run on.

On one side of the bunk he put a light pole for his electric cable. At the top he hung a long arm on hinges. The cable runs to the end of this arm and down to the cart motor. This arm allows the cable to swing back and forth as the cart rolls along, yet it holds it out of the way of cattle and the cart.

The bottom of the cart is made with a narrow gate, the full length of which can be opened and closed. Getting this gate opened at the correct time and the cart to return to its starting point is where Geiger's ingenuity came in again.

Otto built a lever to open the cart gate. The arm is just long enough to catch on a two-by-four across the bottom of the bunk. This is set to trip the gate just as it hits the corral where the cattle are located.

Another lever on the front of the cart is so made that when the cart reaches the end of the bunk, it flips the switch on the two-way motor, reversing it and returning the cart to the starting point. Several V-belts and two pulleys are used for gears.

Over the cart he has mounted two 300-bushel bins made from discarded drums. They were once used for dehydrating alfalfa at one of the many dehydrating mills dotting the Platte Valley. "Probably cost me $75 by the time I had put a removable lid on top," he said.

Geiger's 80-foot bunk will handle 90 head of cattle, but he is planning to extend it to 120 feet so he can feed up to 125 head.

A year ago, Otto Geiger decided that 11 trips over the field to raise a crop of corn were too many. Minimum tillage looked like the right thing to him. He looked over other equipment, then went home and designed one the way he thought it should be done.

He added lister beams and lays to the front of his cultivator. He welded three rods to each side of the modified lays to push the trash and loose dirt away from the row. Pushing all of this out of the way has eliminated volunteer corn from the row. A sub-tiller prepares the ground for the planter which he mounted behind the tractor. A rotary hoe behind each lister also helps prepare the seed bed.

Recently, Otto Geiger was voted Cozad's Outstanding Farmer of the Year. This honor is based upon a candidate's contribution to the community and his good farming practices. Otto's ingenuity in designing his own equipment at low cost probably tipped the vote in his favor over some tough competition. ◆◆◆

Otto's homemade minimum tillage gear reduced corn operations to only four.

Advisor Neal Pohlman, right, presents to Otto the Outstanding Farmer award.

Mrs. Wilma Hill, Vitamin Analyst, studies the bacterial growth in test-tube assay of a B vitamin in MoorMan's Research Department.

She's herding the "animals" in our test-tube feedlot

When can you replace feed lots with test tubes?

When test tubes can provide the same experimental information—in testing for quantity, quality or variability of ingredients.

MoorMan's Research Department does just that in assays of the vitamins, amino acids, minerals and antibiotics used in Mintrates*.

Research laboratory simulates a feedlot

It can be complicated and time-consuming to learn how live pigs or chickens get along with or without a feed ingredient. So, in preliminary testing, our research workers sometimes use microorganisms instead, "feeding" them in test tubes as they might feed pigs in test pens.

Then they measure the growth response of test-tube "animals" just as they would with livestock.

The response is an index of the potency and quality of the Mintrate ingredient.

All research aimed to better customer results

The test-tube feedlot is a good example of importance of laboratory research in keeping and improving Mintrate high quality.

It's just one of many laboratory checks to insure MoorMan users that only the best ingredients go into every sack of our Mintrates.

Our specialists in quality control run over 40,000 analyses each year—checking all incoming ingredients and finished products.

This assures our customers of concentrates of the highest quality.

The payoff is better conversion of home-grown grains and roughage to meat, milk and eggs—at lowest possible cost—with Mintrates.

MoorMan's*

Since 1885

Good Results Through Research and Service

MOORMAN MFG. CO., QUINCY, ILL.

*Trademark Reg. U.S. Pat. Off.

The High Cost of Freedom

Fifty-six men wrote their names forever in this nation's history by signing the Declaration of Independence. Here are some of their stories and the terrible prices they paid for their boldness.

John Hancock's bold signature headed the list of who signed.

By
Kelvin Coventry

HAVE YOU ever sized up the Fourth of July as a "firecracker" type of celebration—exploding loudly one day of the year and forgotten the other 364? Isn't patriotism too sacred for that?

It was to John Morton. Freedom's footsteps were bogged down in the yellow spring mud of 1777. They needed his dying words to give them a lift for the giant steps ahead.

"Tell them . . . tell them that my signature on the Declaration of Independence was the most glorious service I ever rendered my country," Morton managed through clenched teeth. His enemies had hounded him to his death.

John Morton was from Pennsylvania. He was the first of freedom's 56 penmen to lay his all on the altar of independence. But he wasn't alone. The signers of the Declaration paid a terrible price for their boldness.

Ever hear of Lewis Morris, signer from New York? Probably not. He was all ready to sign the Declaration when a messenger dashed up.

"Don't sign! Don't sign!" he implored. "The British and their ships are lying offshore. They will blast your estate to bits if you sign."

Morris never hesitated for an instant. He dipped his pen and signed his name. "My honor is untarnished," he said.

The British landed their troops. They destroyed his home, burned his fences and woodlands, and drove his stock away. His family had to live in exile.

Then there was John Hart, the gruff farmer from New Jersey. He knew that the ground had to be prepared, seed sown, and that liberty had to be cared for and cultivated if it was to survive. He signed.

"John Hart is on our list!" the British declared. "He is a traitor to the King. He will pay dearly for his defiance."

Hessians, the hired mercenaries of the English, swarmed over Hart's farmlands. They burned his crops and buildings. They slaughtered his cattle and farm animals. His wife and 13 children fled for their lives. Didn't he pay a high price for freedom?

Remember Samuel Adams, penman from Massachusetts? His loss? "I gave my only son in battle," was his flint-faced confession. "But—it is better that 999 perish out of a thousand, if one man might survive to retain his liberty!"

Robert Morris, often called the "financier of the Revolution," was another of the daring men who dashed off his name on the honor roll of liberty. His reward? He ended up in debtor's prison after sacrificing his fortune.

And what about John Hancock? He was a gilded dandy who wrote his name in such bold and defiant letters that he couldn't help becoming a marked man. He lost vast quantities of goods to the British torch.

Signers like Ben Franklin, John Adams, Thomas Jefferson, and Ben Rush went on to bigger and better things after they signed. But look what happened to Button Gwinnett. His signature is so rare it is worth $50,000 among present-day autograph hunters.

Gwinnett's honor burned so brightly after he signed the Declaration that he just couldn't stand to be insulted. He fought a duel on the morning of May 16, 1777, was wounded, and died a few days later. No one even knows where he is buried.

Have you ever visited the grave of a South Carolina signer? He was young Thomas Lynch, Jr. His headstone is the entire Atlantic Ocean. He was shy and studious, not the blood-and-thunder type character you usually associate with a cause like freedom. He signed—and suffered.

Lynch fought for the cause he believed in. He caught swamp fever and the life slowly ebbed out of him. He thought that a voyage to France might prolong his life. His ship was never heard from again.

You can tell much from looking at the signature on the Declaration. Notice the name of Stephen Hopkins, the Rhode Islander. His name is written rather shakily. It wasn't from fright. He had a paralytic affliction and had to guide his right hand with his left.

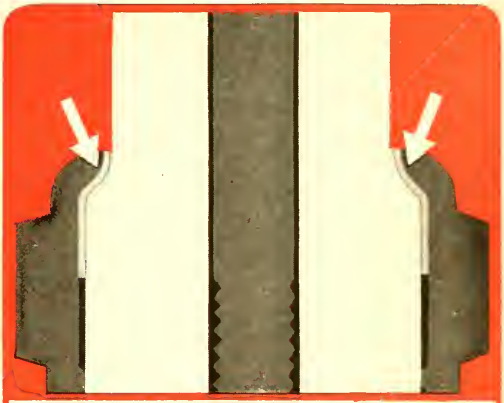
Charles Carroll was the only one who added the name of his estate after his name. Why? There were two other illustrious Charles Carrolls in Maryland, and he wanted the British to make no mistake when they hung him.

The signing of the Declaration wasn't so grim that the situation lacked humor. Bulky Mr. Harrison of Virginia, while signing, noticed Mr. Gerry's spare figure and observed, "When the time comes to hang us, it will be all over with me in a moment. But you will have to kick in the air half an hour after I am gone."

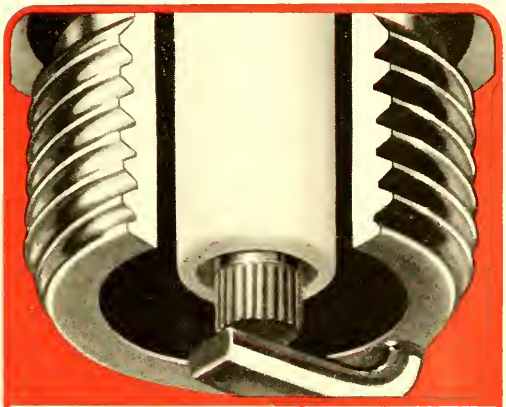
The price of freedom still comes high. People still risk their lives to leap barbed wire barriers, swim surging streams, and find chinks in the Iron Curtain and a life under the torch of liberty. Fifty-six men paid the price for ours. ◆◆◆

Four powerful reasons for replacing with new AC Heavy-Duty Farm Tractor Spark Plugs

1 EXTRA-STRENGTH INSULATOR. Features Buttress-Top design to reduce flashover. It's tougher to help prevent installation breakage, withstand heaviest use.



2 NEW ALUMINUM INTERNAL GASKET. Provides gas-tight sealing for peak engine compression under severe operating conditions.



3 SELF-CLEANING HOT TIP. Thin design heats faster to burn away fouling deposits as they form, cools faster to discourage power-robbing pre-ignition.

4 KNURLED CENTER ELECTRODE. Provides greater sparking capability to ignite combustion gases more easily—reduces possible wasted power, wasted fuel.

New AC Heavy-Duty Farm Tractor Spark Plugs are the only spark plugs designed specifically for farm tractor and implement use. ACs are engineered and constructed tractor-tough to take all the punishment modern farming demands. At the same time, they promote longer-lasting peak engine power, no matter what the job.

Ask for the spark plugs designed to help give you fast starts, longer-lasting peak engine power, top fuel economy. Ask for AC Heavy-Duty Farm Tractor Spark Plugs in the handy AC 4-Pac at your Farm Implement Dealer's today.

AC

HEAVY-DUTY
FARM TRACTOR
SPARK PLUGS

AC SPARK PLUG ✣ THE ELECTRONICS DIVISION OF GENERAL MOTORS

Test Proves

PILOT BRAND

Oyster Shell Better Calcium Source

L. D. Tenhulzen, Iowa poultryman, put 3,150 hens on test ration with high calcium level from cheaper source... no calcium free choice. Result: production dropped sharply, undergrades rose from 4% to 12%.

Hens were returned to original ration containing PILOT BRAND Oyster Shell, and fed PILOT BRAND and granite grit free choice. Result: production and profits went up to normal; undergrades dropped back to 4%.

"I'm convinced PILOT BRAND Oyster Shell is the best source of calcium. Also that oyster shell and granite grit should be fed free choice for the most profitable results," said Mr. Tenhulzen.

PILOT OYSTER SHELL FOR POULTRY

In the bag with the big blue pilot wheel at good feed dealers everywhere.

Oyster Shell Products Company
Mobile, Alabama

WONDERFUL, NEW LOW PRICE ON LINCOLN 180-AMP ARC WELDER

ONLY $110.00 complete.
Colorado & West $3 more.

Why risk breakdown delays? With this farm welder in your shop, you can handle almost any equipment breakdown right in your shop. No more time and cost wasted on trips to town, extra repair bills. Build your own equipment, too . . . wagons, hitches, railings, other farm and home needs.

Never before could you get so much welding equipment value for so little money. Machine welds, brazes, hardsurfaces, cuts metal, thaws frozen pipes . . . comes complete with headshield, electrode holder, sample electrodes, ground clamp, cables . . . nothing else to buy. You just won't find a better welder value anywhere!

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"Here by the Owl"

Mr. Advisor:

"What high school courses other than vo-ag will be of most value to me in a future agricultural career?"

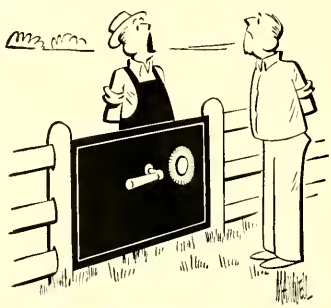
John W. Fraker
FFA Advisor
Kenton, Ohio

WE HAVE a great challenge today in education. We must meet this challenge in these swiftly changing times in vo-ag the same way as with other courses. Agriculture today is not just training students for farming but for many fields related to farming such as feeds, fertilizers, farm machinery, and veterinary medicine.

Today farming is so technical that it has become a business for which we need training in many courses. I believe that most vo-ag students should carefully plan their high school curriculum. Too many students enroll in vo-ag to take the minimum number of courses necessary for graduation. This is not good.

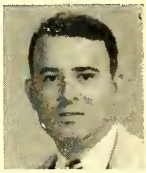
I believe the present vo-ag enrollee should choose such courses as mathematics, English, biology, physics, chemistry, bookkeeping, and typing. I realize that it is difficult in some schools to schedule all of the above courses, but whenever possible, students should take advantage of them. I don't mean just take the minimum amount of mathematics or English, but get as much as possible. Chemistry, physics, and biology, as far as I'm concerned, should be musts. They are part of agriculture.

The one great problem of students getting what they need is scheduling. Many of our smaller schools are just not able to offer the courses the student needs. We have a great challenge in education, and it is to prepare students to assume their rightful places in our future society.



"Our cash crop is planted here."

James R. Cook
FFA Advisor
Greenville, Georgia



MANY Future Farmers will undoubtedly select farming or a related occupation as their life's work. There are several courses offered in most high schools that will be of value to these Future Farmers. English, mathematics, science, speech, and typing are the courses I feel are the most important to Future Farmers.

All Future Farmers need to know how to prepare a business letter using correct punctuation and sentence structure. You will need to know how to prepare a speech, as many of you may hold an important office in local farm organizations.

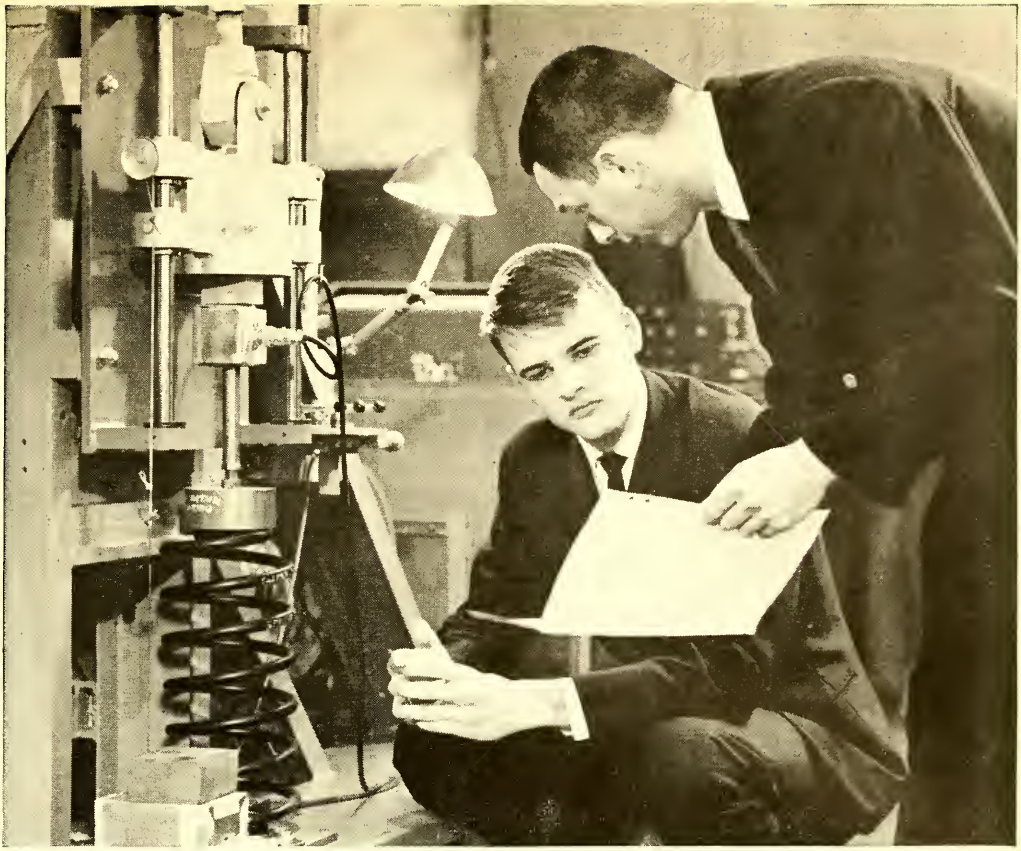
As a farmer you will need to know math since you will have problems in how to figure volume of feed bins, how to measure land, and many similar instances involving mathematics. General mathematics and algebra are needed in preparing for your life's work.

A basic knowledge of science helps you to understand how soils and fertilizers are made and how plants grow. If you are to be efficient in your agricultural endeavors, you must have this basic understanding. If you are able to enroll in a speech class, you will find it to be of much benefit. Life calls for many situations where a person must be able to stand on his own two feet and express himself. A timid person cannot get his point across, no matter how strong it is. Speech training gives you confidence in facing the general public as well as in making friends.

In my work as an FFA advisor, I have seen the need for experience in typing. I have many letters and articles to write, and if I had taken typing in high school, I would be saving much time in my work today. It is my feeling that all vo-ag students should have at least one year of typing.

All of these courses I have named will greatly aid any Future Farmer.

(Editor's Note—Do you have a question you would like to see answered by a panel of advisors? Put it on a post card or in a letter addressed to "Here by the Owl" Editor, The National FUTURE FARMER, Alexandria, Virginia, 22306.)



Teen-ager Bjorn Dahlberg and a GM engineer check out the dynamic spring stroker.

putting a pothole in a smooth road

It's an everyday task for GM's dynamic spring strokers. They literally put car and truck parts through a lifetime of use in just a few days by simulating the most rugged stress conditions the parts would ever experience.

For example, one stroker can duplicate the effects of uneven roads, sudden turns, and a variety of other driving conditions to test the performance of suspension parts mounted on it. Another spring stroker tests a part's endurance—how it will stand up under repeated hammering, stresses and strains.

All the while, GM engineers observe the parts with sensitive electronic measuring devices to find out *exactly* what is happening. In this way they will learn whether a part is engineered properly and, often, find a way to improve it even further.

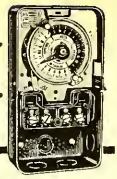
This kind of activity goes on every day in GM engineering labs and at the Proving Grounds. It's part of a constant "get tough" policy on engine mounts, steering gears, whole suspension systems—just about every part used in GM cars and trucks. And it's one way that GM makes sure it makes things better through research and engineering.

General Motors *makes things better*

Chevrolet • Pontiac • Oldsmobile • Buick • Cadillac
With Body by Fisher • Frigidaire • GMC Truck
& Coach • GM Diesel • Delco • AC Spark Plug

Bjorn Dahlberg, 18, of Solna, Sweden, an exchange student at Fenton (Michigan) High School, was recently a guest at GM's Technical Center at Warren, Michigan. The future mechanical engineer is a member of the senior class at Solna Larorerk High School. He's interested in electrical experiments and model airplanes.

SAVE TIME!
SAVE WORK!
SAVE MONEY!



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TIME CONTROLS

When you find a Paragon Time Control on the mechanized feeding system you buy, or any other automatically controlled equipment, you can be sure of the utmost reliability — plus long and trouble-free service.

Increased Production: Paragon Time Controls assure absolute regularity in interval feeding, for top egg production and profit over feed cost. Avoids waste through over-feeding.

Economical Gains: Paragon Time Controls do more than regulate interval feeding. Feed intake is increased—resulting in faster growth; more economical gains in broilers and turkeys.

Controlled Maturity: Paragon Time Controls, used in lighting layers ever since the beginning of Winter lighting, are now widely used in maturity control programs to increase egg size and production.

Improved Health: Paragon Time Controls assure positive, constant air turnover when used to supplement thermostatically controlled fans. Improved health, appetite and feed consumption result through regular ten-minute fan operation.

America's finest mechanized equipment is automated with Paragon Time Controls. Let this be your highest recommendation to complete your entire mechanization program with Paragon. Time is money, control it with Paragon! See your authorized Paragon Distributor or write Dept. 1841

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1841 TWELFTH STREET • TWO RIVERS, WISCONSIN

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Address.....
City.....State.....

This lad set No. 110 Victor Conibear traps to catch the money-makers—muskrat, mink and skunk. It's the only trap ever to win the *Certificate of Merit* from the American Humane Association.

Victor Conibears set almost anywhere—in holes, runways, cubbies, on the ground, even under water, ice and snow.

He's set with Victor Conibear traps ! Are you?

Go to your sporting goods dealer now. He also carries the No. 120 for mink and the No. 330 for beaver and otter.

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Plan a practical

Farm Library

By Foster Mohrhardt
Director, NATIONAL AGRICULTURAL LIBRARY

YOUNG farmers today need ready sources of information on many subjects. You would need unlimited travel money, hundreds of letters of introduction, and more time than you realize to visit all of the agricultural experts to gather their special knowledge. But don't dismay! A personal farm library in your home can give you this information when and how you want it.

You probably already have a start on your own library. Your vo-ag textbooks, farm bulletins, magazines, clippings, and even handbooks distributed at county and state fairs can be useful library tools. All you need to do is organize the material and know how to use it.

But before you embark completely on collecting agricultural material, you must realize that every good farm library should have books on topics not related directly to farming. As a guide in building the nonagricultural section of your farm library, I strongly recommend that you get a copy of *The Wonderful World of Books*, which was edited by Alfred Stefferud of the USDA. It is a paper-bound book selling for 75 cents that gives you 75 well-selected articles on books, libraries, and reading to help you start a library.

It is only fair to warn you that when you begin to build a personal library, even in a modest way, it can become habit-forming, costly, and time-consuming. We all have a natural tendency to accumulate things that we aren't quite sure we need but that we feel may be useful at a later date. Collecting too much material has the disadvantage of making it difficult to locate quickly what we do want. The most effective way to overcome this is to decide at the beginning what purposes you want your library to serve and what subjects you feel are necessary.

You will want some general material on the entire field, but you will have a special area such as dairy, poultry, livestock, or crops to which you will want to dedicate your library. Even after you have decided that poultry, for instance, is your field for special collection, you may wish to further restrict it to publications about egg production, broilers, or hatchery work. You don't have to make a formal statement listing all the items in your special interest, but you should determine how far you want to go in building the book collection before you begin.

Once you have determined what to collect, you will need help in learning about, selecting, and collecting your basic materials. Then you must find good sources of information to keep you current with new developments.

Your first addition to the library should be "Library List No. 1, Selected List of American Agricultural Books in Print and Current Agricultural Periodicals." This is published by the National Agricultural Library, Washington 25, D. C. It's available free by writing to the Special Bibliographies Section of the Library in care of the U. S. Department of Agriculture.

This list groups all books and magazines under general subjects such as field crops, forestry, and soils. Many of the books and periodicals will be available at your school library or the local public library. If so, you can examine them to see if you would like to have them for your own farm library. The list is designed especially for the farmer and the student and does not list technical publications of the state or federal experiment stations.

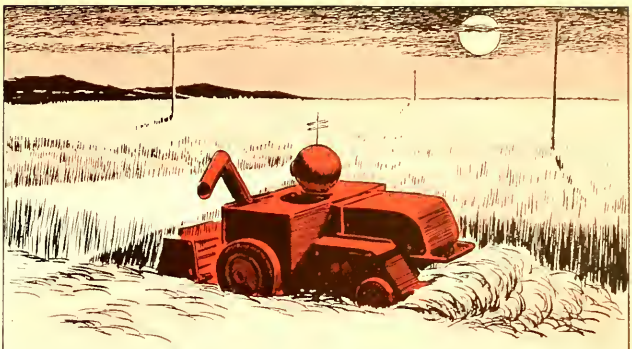
A guide to these technical Government publications is the "List of Available Publications of the USDA" and is available from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 35 cents. Your state experiment station also has a list of state publications. With these lists you can spend some time deciding which special selections to get first for your library.

Now it's time to obtain these publications. Books issued by commercial publishers must be purchased through your local bookstore, a general book dealer, or directly from the publisher. Your local bookstore has the advantage that you can see the book and evaluate it before buying. Your local book dealer or the public library will be glad to give you assistance in book collecting to put you toward your farm library goal. ◆◆◆

THE STORY OF FARMING

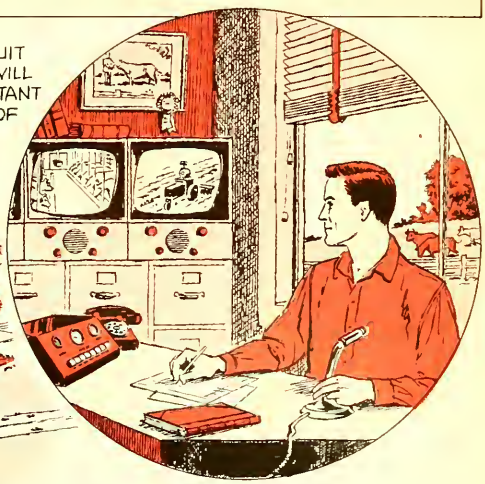
No.6 The Future of Agriculture

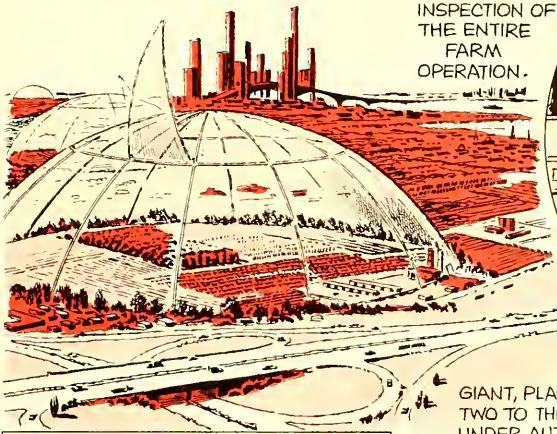
THE PAST TWO DECADES HAVE BROUGHT TREMENDOUS ADVANCES IN FARMING SCIENCE AND TECHNOLOGY. AND THESE ARE MERELY THE BEGINNINGS OF THE AMAZING BENEFITS THAT ARE TO COME IN A CONTINUANCE OF THIS GREAT AGRICULTURAL SCIENCE BREAK-THROUGH.
HERE ARE A FEW FORECASTS:



FARM MACHINES WILL OPERATE ENTIRELY BY AUTOMATIC TAPE CONTROL 24 HOURS A DAY, POWERED BY BEAMED ELECTRONIC ENERGY.

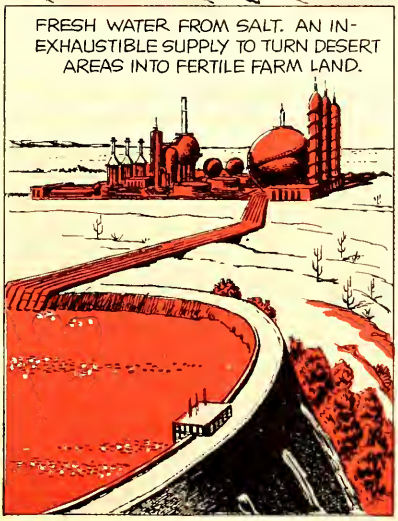
CLOSED CIRCUIT TELEVISION WILL ALLOW CONSTANT INSPECTION OF THE ENTIRE FARM OPERATION.

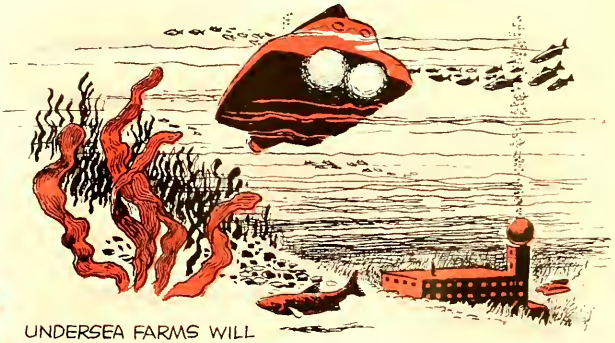




GIANT, PLASTIC DOMES FOR SUPER-FARMS. TWO TO THREE CROPS PRODUCED ANNUALLY UNDER AUTOMATICALLY CONTROLLED CLIMATIC CONDITIONS.

FRESH WATER FROM SALT. AN INEXHAUSTIBLE SUPPLY TO TURN DESERT AREAS INTO FERTILE FARM LAND.



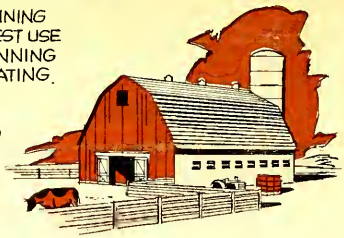


UNDERSEA FARMS WILL TAP THE VAST RESOURCES OF FOOD FOR HUMANS AND LIVESTOCK, FERTILIZERS AND FIBERS, THAT LIE BENEATH THE OCEANS OF THE WORLD.

EVERY FARM WILL BE EQUIPPED WITH ELECTRONIC COMPUTERS TO IMPROVE THE FARMER'S MARKET-MATCHING CAPABILITIES.

PLANNING YOUR FARM BUSINESS for PROFIT

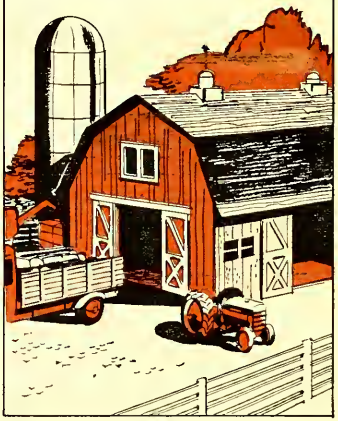
AS IN ANY SUCCESSFUL BUSINESS, PLANNING IS ESSENTIAL IF YOU ARE TO MAKE THE BEST USE OF YOUR FARM RESOURCES. CAREFUL PLANNING HELPS YOU SET UP AN EFFICIENT OPERATING SYSTEM TO PRODUCE A HIGH, CONTINUOUS NET RETURN AND A SATISFACTORY LIFE FOR YOU AND YOUR FAMILY. BUT BEFORE YOU CAN PLAN, YOU MUST TAKE A REALISTIC LOOK AT YOUR FARM RESOURCES. IN DOING SO, CONSIDER THE FOLLOWING:



LAND... HOW MANY ACRES—AMOUNT SUITABLE FOR TILLAGE, PASTURAGE, WOODLOT, ETC. MAKE UP A SOUND LAND-USE PLAN. USING THE QUALITY OF THE LAND TO THE BEST ADVANTAGE FOR PRESENT AND FUTURE PROFIT AS WELL AS SOIL CONSERVATION... PLUS WATER AND CLIMATE.

LABOR... AVAILABILITY, QUALITY, PRESENT AND FUTURE SCALE OF WAGES. INCLUDE YOUR OWN, MEMBERS OF YOUR FAMILY, NEIGHBORS (ON AN EXCHANGE BASIS DURING RUSH PERIODS).

CAPITAL... THIS INCLUDES BUILDINGS, MACHINERY AND EQUIPMENT, LIVESTOCK, SUPPLIES, CASH, CREDIT AND FARM IMPROVEMENTS... (PERMANENT FENCES, DRAINAGE SYSTEMS, WATER SYSTEMS, AND SOIL-CONSERVATION STRUCTURES).



LIVESTOCK... FATTENING ANIMALS... PRODUCTION ANIMALS FOR MILK, EGGS, WOOL... BREEDING HERDS. THESE SAME ANIMALS MAY SERVE FOR MORE THAN ONE OF THESE PURPOSES.

SUPPLIES... FUEL, FEED, SEEDS, FERTILIZER, ETC., TO BE USED IN A SINGLE YEAR. FATTENING ANIMALS ARE SIMILAR TO THESE ITEMS.

MANAGEMENT... THIS, TOO, IS AN IMPORTANT FARM RESOURCE... IT'S YOUR ABILITY TO ORGANIZE AND OPERATE YOUR FARM SUCCESSFULLY AS WELL AS ARRANGE YOUR LIVING FOR THE MOST CONVENIENCE AND HAPPINESS.

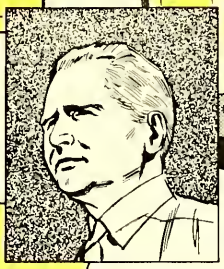
A TRUE STORY OF FFA

by AL STENZEL

DURING THE SUMMER OF 1928, A WISCONSIN AGRICULTURE EDUCATOR WAS BUSY PREPARING AN EXHIBIT FOR THE FIRST NATIONAL FFA CONVENTION. AS HE WORKED HE THOUGHT...

HOW APPROPRIATE IT WOULD BE TO INCLUDE A STATEMENT OF THE IDEALS OF FUTURE FARMERS...TO EXPRESS IN WORDS THEIR FAITH IN FARMING AND COUNTRY LIFE!

HE HAD BEEN RAISED ON A FARM AND KNEW ITS HARDSHIPS. YET IN HIS WORK AS A VO-AG TEACHER AND NOW AS A TEACHER EDUCATOR, HE HAD SEEN THE EAGERNESS WITH WHICH BOYS TACKLED FARMING PROJECTS.



ERWIN TIFFANY WAS MORE THAN A TEACHER OR COUNSELOR OF FARM BOYS...HE WAS THEIR FRIEND. HE WAS A SINCERE, QUIET MAN, WHO WORKED HARD AND WROTE WELL. THE WORDS OF MR. TIFFANY WERE ADOPTED AS THE STATE CREED FOR WISCONSIN. AT THE THIRD NATIONAL CONVENTION, THEY BECAME THE CREED OF EVERY FUTURE FARMER.

AS ERWIN TIFFANY PONDERED THESE THINGS, HE THOUGHT OF A WAY TO EXPRESS THE FEELINGS OF FARM BOYS. HE BEGAN TO WRITE: "*I BELIEVE IN THE FUTURE OF FARMING...*" WHAT HE WROTE BECAME:

The FFA Creed

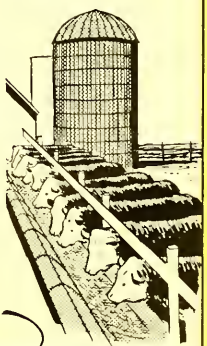
I believe in the future of farming, with a faith born not of words but of deeds — achievements won by the present and past generations of farmers; in the promise of better days through better ways, even as the better things we now enjoy have come up to us from the struggles of former years.

I believe that to live and work on a good farm is pleasant as well as challenging; for I know the joys and discomforts of farm life and hold an inborn fondness for those associations which, even in hours of discouragement, I cannot deny.

I believe in leadership from ourselves and respect from others. I believe in my own ability to work efficently and think clearly, with such knowledge and skill as I can secure, and in the ability of organized farmers to serve our own and the public interest in marketing the product of our toil. I believe we can safeguard those rights against practices and policies that are unfair.

I believe in less dependence on begging and more power in bargaining; in the life abundant and enough honest wealth to help make it so — for others as well as myself; in less need for charity and more of it when needed; in being happy myself and playing square with those whose happiness depends upon me.

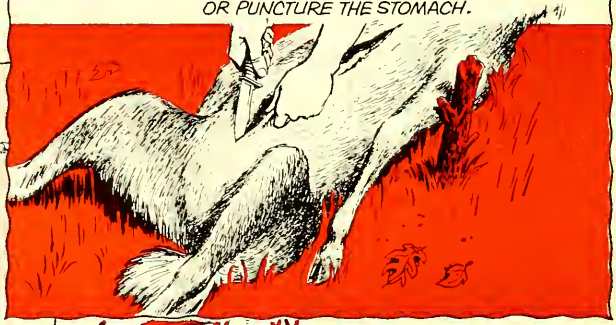
I believe that rural America can and will hold true to the best traditions in our national life and that I can exert an influence in my home and community which will stand solid for my part in that inspiring task.

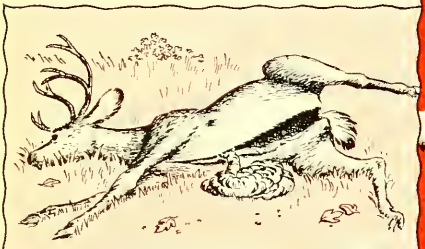


HOW TO FIELD DRESS YOUR DEER

YOU DON'T HAVE TO BE A BUTCHER OR A SURGEON TO FIELD DRESS A DEER. IT'S NOT THAT TOUGH A JOB—BUT IT DOES REQUIRE A BIT OF KNOW-HOW TO DO IT SIMPLY AND CLEANLY WITH AS LITTLE FUSS AS POSSIBLE.

FIRST, WEDGE THE DEER'S CARCASS ON ITS BACK USING STICKS TO HOLD IT IN PLACE. IN HANDLING THE DEER, AVOID THE MUSK GLANDS FOUND JUST BELOW THE HOCKS. WITH YOUR KNIFE SLIT THE SKIN FROM THE BREAST BONE DOWN TO AND AROUND THE VENT. *DO NOT CUT INTO THE INTESTINES OR PUNCTURE THE STOMACH.*





NEXT, LAY THE DEER ON ITS SIDE; ROLL OUT THE INTESTINES. CAREFUL CUTTING WILL FREE THE ENTRAIL ATTACHMENTS ALONG THE BACKBONE AND THE LOWER ORGANS WILL ROLL OUT EASILY.

BACK AT CAMP, HANG THE CARCASS FROM A TREE LIMB BY ITS ANTLERS. OPEN THE RIB CAGE AND SPLIT THE PELVIS WITH A SMALL HAND AXE. PROP THE BODY CAVITY OPEN WITH STICKS, THE BACK LEGS, TOO. THE DEER MUST BE COOLED AS QUICKLY AS POSSIBLE. WIPE ALL EXCESS BLOOD OUT OF CAVITY—***NEVER USE WATER!***

FINALLY, OPEN THE CHEST CAVITY BY REMOVING THE DIAPHRAGM. PULL OUT AS MUCH OF THE LUNGS AND ORGANS AS POSSIBLE, THEN REACH HIGH IN THE CHEST CAVITY TO CUT THE WINDPIPE. DRAG THE WHOLE MASS AWAY FROM THE BODY CAVITY, SAVING THE HEART AND LIVER FOR SOME GOOD EATING: TRIM OUT ALL BATTERED MEAT AND BONE WHERE SHOT WENT THROUGH.

TAKE PLENTY OF PAPER TOWELS ALONG WITH YOU ON EVERY HUNTING TRIP. USE A ***SHARP*** *KNIFE—IT NEED NOT BE A LARGE ONE—A MEDIUM SIZE HUNTING KNIFE IS FINE. CARRY ALONG 10 FT. OF NYLON ROPE TO DRAG AND HANG DEER.*

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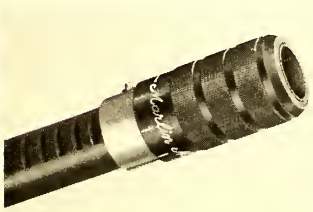

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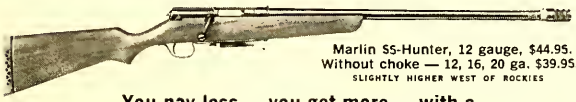

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The USDA Story

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USDA Photos

THE achievement of the American farmer—who through rapid adoption of technology has made it possible for the American people to have the best supply of food in the world at the lowest cost—has been called this country's greatest success story.

This success story is partly a result of the services of the U. S. Department of Agriculture which benefit farmers and consumers alike. These varied and vital services performed by the Department's 80,000 full-time employees in the 50 states and 60 foreign countries include the following:

Research is one of the major functions of the USDA. Scientists seek improved methods of controlling insects and plant and animal diseases and understanding and developing plant and animal growth regulators. They also try to find new uses for surplus commodities and better ways to transport and market farm products. Four large regional USDA laboratories are devoted to new use research.

Education goes hand in hand with research. Without an effective educational program to get research out of the laboratory and into the hands of farmers, USDA's findings would be of limited value. The Cooperative Extension Service is the field educational arm of the Department and the land-grant colleges. It is sponsored jointly by Federal, State, and County Governments.

Marketing and crop reporting hold an increasingly important place in the USDA program to assure a smooth flow of products from farm to consumer. This involves marketing orders, promoting markets abroad, and supervising of future trading on commodity exchanges. Distributing food to the needy, developing standards and grades, inspecting a wide range of farm products, and collecting and disseminating farm market news and crop reports are only a few of USDA's responsibilities.

USDA also analyzes conditions affecting farm production, prices and income, and the outlook for various commodities. Farmers can put this information to good use in their production and marketing plans.

Conservation of soil and water is carried on through 2,900 soil conservation districts to help control floods, water, and wind erosion. Also, the Department shares with farmers and ranchers the costs of approved soil and water conserving practices. A total of 155 national forests and 186 million acres of other land is administered for the best conservation of resources. In addition, the USDA carries on cooperative work with the states to aid private forest landowners.

Stabilization activities include acreage allotments and marketing quotas; feed grain and wheat stabilization programs; the conservation reserve; price support for numerous commodities; reduction of surpluses through sales, barter, donation, and other means; helping obtain adequate farm and commercial storage for farm products; administering the Sugar Act; the National Wool Act, and the International Wheat Agreement; and providing assistance in natural disasters such as drought.

A program now operating in nearly a third of the nation's farm counties gives individual farmers a chance to insure crops against loss from causes beyond their control, such as weather, insects, and diseases.

Credit with farm and financial management help is provided for farmers who cannot get needed financing elsewhere. Credit is available for farm operating expenses; farm purchases; construction of farm buildings and rural homes, including ones for senior citizens; water development and soil conservation; small watershed development; recreation enterprises; and emergency credit needs.

Loans are made to extend electric service and furnish or improve rural telephone service to unserved rural people, mainly through nonprofit cooperative associations.

The Office of Rural Areas Development provides leadership in current and long-range rural areas development programs to eliminate causes of rural poverty. Programs of the various agencies are coordinated to promote economic growth and new opportunities in rural areas through public and private agencies.

USDA defense program includes responsibility for food from farmer to retailer and for defense of rural areas from fire and biological and chemical warfare.

As a part of your future in farming, you'll want to know how your USDA can serve you. To obtain USDA services, contact local office of Department agencies. Many, if not most, are located in county seat towns. These will include the offices of the county agricultural extension and home agents; the Farmers Home Administration which makes loans; the Agricultural Stabilization and Conservation Service, where acreage allotment, price support, disaster assistance, and cost-share conservation programs are administered; and the Soil Conservation Service, which provides farmers with technical assistance in soil and water conservation.

Information on USDA programs is made available through newspapers, farm magazines, radio, and television.

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D. Howard Doane, chairman of the board of Doane Agricultural Service, Inc., recently wrote an article on "The Past 50 Years in Agriculture," in which he stated, "The transition of the last 50 years has mirrored many changes from great heights to deep depressions. The man who has constantly improved the quality of the product in your food costs, and made it possible to obtain it for fewer hours of labor than ever before, is still the American farmer."**

This quotation ably portrays the importance of the human element in farming and ranching today. As a successful farmer, rancher or businessman you are vitally concerned with improving your operation and there is no better way than to have the right information at the right time.

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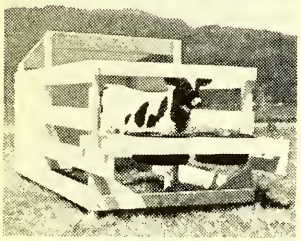

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History of the Breed

THE BROWN SWISS

WIDELY known as probably the oldest of our dairy breeds, the Brown Swiss's early history is lost in antiquity. Diggings in the Bronze Age dwellings of the ancient Swiss Lake Dwellers reveal cattle bones quite similar to the Brown Swiss we know today. But whatever the very early history of the "Big Brown Cows," they came eventually to the peaceful little republic in the heart of the Alps we know as Switzerland.

This proud nation in southern Europe, handicapped by its steep and impassable mountain ranges and twisting

valleys, directed its attention to cattle breeding to offset its lack of tillable acres. Farmers began breeding hardy solid-brown cattle in the Alpine pastures at altitudes of from 3,000 to 8,500 feet above sea level. The unusual physical exertions and high altitude under which generation after generation of these cattle were bred played an important part in the rugged modern-day Brown Swiss. Reared in the Alps and grazed on Alpine grass, they became one of the healthiest dairy breeds in the world.

The breed has stayed one of the purest of the recognized breeds of dairy cattle. There is no record of infusion of foreign blood nor of crossing with other cattle throughout the establishment of the breed. So well fixed did the breed characteristics become that cattle raisers from most of the surrounding European domains started importations of Brown Swiss stock to strengthen their herds.

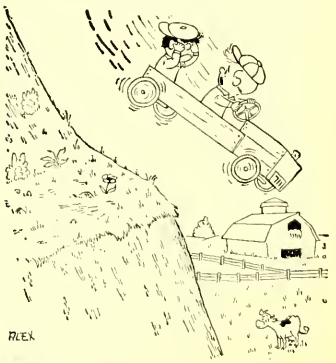
Then during the winter of 1869, Henry Clark of Belmont, Massachusetts, brought a Brown Swiss bull and seven females to his farm from Schwyz, Switzerland, and their merits began to spread within the growing United States. A total of 251 of their descendants were recorded before the next importation of Brown Swiss was undertaken 13 years later in 1882. Early growth of the breed in the U.S. centered in New England and a few midwestern states, until tragedy struck around the turn of the century. Foot-and-mouth disease was spreading across Europe, and it was feared Brown Swiss importations might bring it to this country.

Further importations were prohibited, and one of America's finest herds, Barton's Sedgely Farms, was virtually eliminated as a control measure against the disease. But from the few remaining show animals of the Barton herd came some of the breed's leading cow families. Then in 1931, the last known group of Brown Swiss cattle was brought here from Switzerland.

From these few importations, numbering about 25 bulls and 130 cows, have descended 559,737 registered Brown Swiss animals to date. Popularity of the herd grew most rapidly in the Midwest and spread to all sections of the nation. Today, the rugged brown cows are found in 49 of the 50 states—from the hot summers of El Paso, Texas, to the long, cold winters of Palmer, Alaska. Their tolerance of extremes in environment has popularized them in the large commercial dairy areas of California and the Southwest.

Brown Swiss cattle are solid brown, varying from light to very dark. Mature cows average from 1,400 to 1,600 pounds, while mature bulls weigh in excess of 2,000 pounds. The breed is noted for milk high in butterfat content, and a Brown Swiss, Lady's Gypsy Girl, produced over 12,000 pounds of fat in 5,562 days to set an unequaled world's record.

Organized in 1880 by a group of breeders in Worcester, Massachusetts, the Brown Swiss Cattle Breeders' Association now has its offices on the banks of the Rock River in Beloit, Wisconsin.



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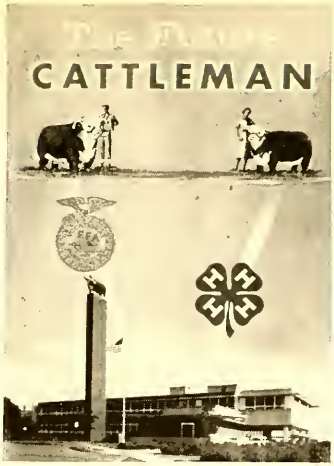

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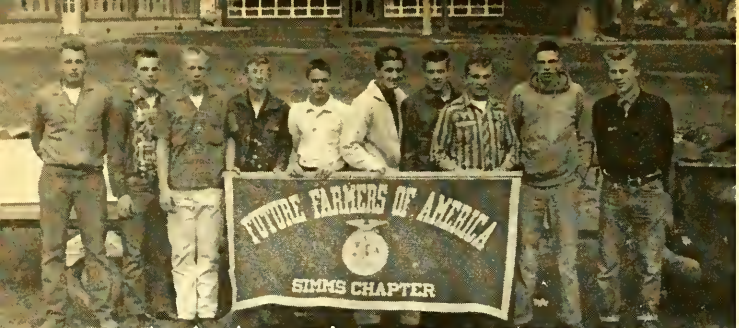

CAMPING TRIPS

Build Stronger FFA Chapters

A MOTOR caravan wound its way down from the rugged mountains and canyons of western Montana early this summer and headed east toward the small town of Augusta. To onlookers along the way, the pickup trucks and small boat marked the group as ordinary campers returning from the remote Sun River Canyon. But to Holgrim Hollo, advisor for the Simms FFA Chapter, it was another "first" for Future Farmers in the camping party.

An outdoorsman at heart, Advisor Hollo first brought up the idea for an FFA camping trip when he was advisor of the Whitehall Chapter more than six years ago. Members of the chapter quickly took to the idea of several days in the mountains, and before Hollo left to teach at Simms, he personally escorted three such trips. Then, during the closing days of this past May, he was bringing members of the Simms Chapter back from their first chapter camping trip.

It was a select group that made up the 11 Future Farmers accompanying Advisor Hollo. Because not all chapter members could be taken along, certain qualifications were expected from those making up the camping party. Each FFA member had to qualify by being either a chapter officer or a senior, having at least a "C" average in all subjects, and not having any unexcused absences from FFA meetings during the year. The chapter's requirements had limited the number of Future Farmers to 11, an easily supervised group.

Pleasant memories of the three days in the wilds filled the Future Farmers and their three adult leaders on the trip home. There had been the weeks of planning and preparation to get the trip organized this first time. Chapter members had purchased a large 16-man Army tent, cooking grills, large wash pans, and utensils from a surplus outlet over in Helena. Busy junior and senior vo-ag students had combined their shop talents to make camp stoves from discarded 25-gallon oil drums, and a checklist of supplies was checked and double-checked.

Then there was the problem of group insurance for the campers. This was solved with a policy paid for by the Simms Chapter at the rate of 7 cents per person per day. And a final briefing in the form of a "heart-to-heart" talk by Advisor Hollo on the dangers of taking chances on a camping trip.

The happy group then headed west for Sun River Canyon because here was lake and river fishing, hiking, and boating in a small, secluded area. Deer, elk, bear, Rocky Mountain sheep, and coyotes abounded almost to the very campsite of humans, and seldom failed to excite even the veteran camper. But most important of all, perhaps, was the fact that Advisor Hollo knew the area thoroughly from previous trips. Everything added up to a perfect camping opportunity.

Chapter members took a 16-foot boat with a 35-horsepower motor along for the trip and dropped it off at the Gibson Dam boat landing not far from the campsite. When camp was made the first morning, small groups alternated taking the boat to the upper end of the lake where the north and south forks of the Sun River meet. After fishing for a while, it was back to the landing and the hike to Beaver Creek Campground, where the remainder of the Simms members were located.

Days had been filled with pleasant memories of horseshoe pitching, volleyball, the long hike to the top of Saw Tooth Mountain, and periods of waiting to spot wild game in nearby meadows. Not to be forgotten either was the now-famous duty list that announced each Future Farmer's job for the day. There was the wood detail, the water carrying, and the turn at kitchen duties —"KP" to the adults with Army duty behind them.

As the eventful three days came to a close back home at the vo-ag department, everyone agreed that Simm's first FFA camping trip had been a success. All that remained were filing details of the trip for use next year and settling the trip's costs. This amount, approximately $125, is paid for by the Simms Chapter treasury.

Years before, Advisor Hollo had found a group activity such as this to be a strong factor in getting members to work for a stronger FFA chapter. Now as more members look forward to a similar opportunity next year, he is further assured of its value.

◆◆◆

Fishing on the remote lake below Gibson Dam was a relaxing and rewarding experience for these Future Farmers. Note chapter mess tent in background.

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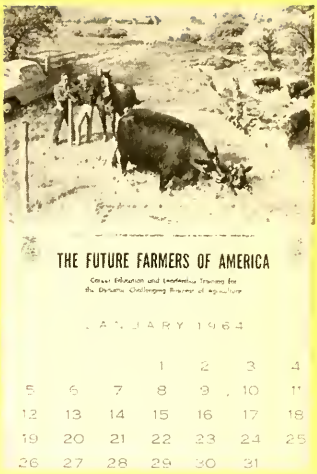

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Across the U. S. A., Future Farmers are "Learning to Do; Doing to Learn; Earning to Live; and Living to Serve."

THE FFA IN ACTION

ARIZONA—Chapter advisors from all sections of the state met recently at the University of Arizona campus at Tucson to select the top advisor of the year. When word became official at a recognition dinner, it was Advisor Bill Cox of the Tempe Chapter who had the honor.

Based on leadership, teaching skills, and achievement, Cox's award was well earned. His Tempe Chapter this year was one of only 69 in the nation to receive the coveted Gold Emblem award. The vo-ag department has nearly doubled in size since the talented advisor took charge a short three years ago, and interest in the curriculum is at an all-time high.

Last summer the Tempe Chapter walked off with the top honors in chapter contests in Arizona under his leadership. The varied project program earned members over $65,000 in total income this year from everything including dairy cows, poultry, farm mechanics, and crops. It's another feather in Bill Cox's hat, but from his past record, it won't be his last.

IOWA—Twenty-five years of FFA history flashed back to citizens of Atlantic, Iowa, this summer as the Atlantic Chapter celebrated its silver anniversary. National FFA President Kenny McMillan flew into the southwest Iowa community to help with festivities and receive a key to the city. Then early in the afternoon, chapter members sponsored a plane ride over the area, followed by a coffee hour and farm tour for the honored guests.

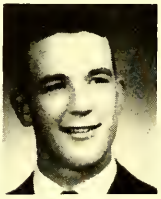
Over 350 FFA members, advisors, former Future Farmers, and close friends sat down over a ham dinner to mark the occasion and to hear how 25 years of FFA work had influenced the community. It was back in 1924 that the Atlantic School District hired its first agriculture instructor, Carl Goeken. The enrollment grew, the classes became a department, and in the fall of 1937 the Atlantic Chapter was chartered. Six advisors have worked with the chapter since then, except for a five-year break during the war.

Atlantic's first advisor received a service award, Kenny McMillan spoke on the challenge open to Future Farmers, and everyone went home to look forward to the next 25 years.

More than 350 Future Farmers and families help celebrate 25 years of FFA.

Kenny McMillan receives the key and a photograph of the city of Atlantic.

KANSAS—Last year 18-year-old Gary Creager of La Cygne won the state public speaking contest over 22 other speakers and went home to inspire his younger brother, Marvin, to take the same route. Not to be outdone, Marvin brought home the state title to the La Cygne Chapter once again this year, and made the Creager brothers probably the only two in FFA history to win state public speaking contests within a year of one another.



Gary Creager
1962 Winner

Marvin Creager
1963 Winner

What are their formulas for success? "Choose a subject that you understand and like. Be willing to work and practice and never turn down an opportunity to speak," were Gary's thoughts. "Speak with sincerity and conviction," Marvin added. "Don't try to orate. Don't speak in a monotone. And don't stare at your audience."

The Creagers set no rigid goals to be state champs. In fact, they didn't feel they had the ability. They listened to each other speak and offered suggestions but preferred to practice alone. When Gary learned that Marvin had won this year, he was thrilled. "I was twice as happy and twice as proud as when I won myself," he said.

MINNESOTA—An ex-farmer met three Future Farmers earlier this season at a game between the New York Yankees and the Minnesota Twins, and it was farm talk, not baseball, that was exchanged. The ex-farmer was Ralph Houk, manager of the New York Yankees and a former Future Farmer at Lawrence, Kansas, back in 1938. The Future Farmers were three star athletes whose excellence in sports earned them a visit with the Yankee manager.

Over 900 Minnesota Future Farmers were in attendance at the game when Dennis Schroeder, all-state basketball star from Marshall; Charles Benda, all-state football star from Jackson; and James Maher, district high school wrestling champ from Hastings were introduced.

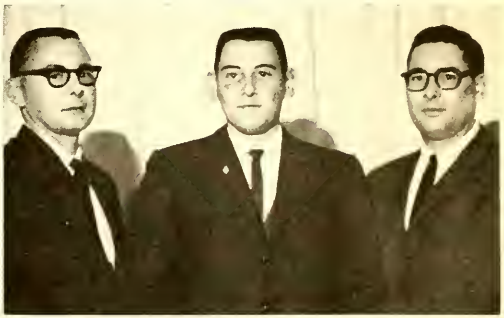
Manager Houk recalled how he almost became a farmer after completing his FFA work. "I milked the cows twice a day by hand, once in the early morning and once late at night. Nobody had heard of milking machines," he told the three Future Farmers. The Yankee baseball manager revealed that he had thought often about returning to the farm in the early days of his career.

Yankee Manager Ralph Houk, right, talks of his days back on the farm with Minnesota's three all-state star athletes.

CALIFORNIA—When school opens this fall in central California, there'll be three brothers teaching vo-ag. This doesn't seem too startling until you study the rest of the facts about the Scheuber brothers from Modesto.

All three—Pius, Leo, and John—were outstanding FFA members at Modesto High School, where Pius is now head of the vo-ag department. All three won the State Farmer Degree, two of the three are teaching in the same county, Stanislaus, and the other is teaching just over the border.

Leo is now head of the department at Escalon, while John will be with the Patterson vo-ag department. Since all three departments are in the same FFA region, brotherly love will face a strong test when the departments enter competition against each other. Leo and Pius have continually coached winning FFA teams, and their respective chapters were two of the three from California entered in the National Chapter Award contest. John, youngest of the three, will be just starting this fall on his teaching career.



The Scheuber brothers—Leo, John, and Pius—shake hands before departing to vo-ag classes within 25-mile radius.

NEVADA—The group intently studying the Nevada assemblyman's list of proposed bills at the state capitol in Carson City are Terry Connolley, state FFA reporter; Howard Christensen, state executive secretary; and Johnnie Daniels, state FFA treasurer. The dignified member of the state legislature is none other than Bryan Hafen, national FFA vice president from the Pacific Region in 1958-59. The Mesquite, Nevada, native is serving his second two-year term as a representative from his home district. Politics have been a part of Bryan's life ever since he left FFA office at the 32nd National Convention.

Bryan Hafen goes over his latest legislative bills with state FFA leaders.

ILLINOIS—The DeKalb Chapter has probably the winningest set of cousins to be found anywhere. Not only are the four Future Farmers lined up behind the banner first cousins, but they are all officers of their FFA chapter.

You can identify Joe Faivre, treasurer-elect; Louie Faivre, reporter; Mike Walter, secretary and president-elect; and John Steimel, treasurer.

Their combined farming programs take in 125 acres of cropland, 29 beef animals, 9 sows, and 3 dairy animals. It's a family tradition for the four cousins. Among their families number an American Farmer, several State Farmers, and numerous chapter officers.

Four cousins from DeKalb proudly hold their chapter's banner in vo-ag class.

OHIO—While Jim Rouse and Ronnie Clyborn, Future Farmers from the Byhalia-York FFA Chapter, were repainting the welcome signs coming into their home community, they got the idea to promote safety at the same time.

So at each end of town they refinished the FFA signs, then painted the following safety slogan on the back: "Be alert, don't get hurt, practice safety." Now as each motorist leaves the community, he sees the reminder to drive safely—courtesy of Jim, Ronnie, and the Byhalia-York Chapter. Area residents hail the project as a big step forward in reminding all drivers to put safety before speed.

Newly painted sign on left contrasts old one. Safety slogan is on backs.

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DEPARTMENT 1011F

Dan Isler, a 1962 winner.

NEW MEXICO CHAPTER HAS UNIQUE

Self-Improvement Contest

REALIZING the importance of leadership development within the vo-ag program, Future Farmers of the Roswell, New Mexico, Chapter have set out to make sure each member gets his share of experience. For the past seven years the chapter has operated a unique self-improvement contest open to all members. Its operation and results, they feel, could well set an example for other chapters to follow.

The contest is set up on a point basis with the two top scorers winning expense-paid trips to the National FFA Convention each fall. One winner is selected from the Green Hands and one from the advanced vo-ag classes. These winners must have received the most points through official activities during the previous school year.

Point-making activities under such headings as leadership positions, degrees, scholarship, and supervised farming programs are listed along the top of a large board entitled "Self-Improvement Chart." Then all of the chapter members' names are listed alphabetically down the left side. Here in full view of Future Farmers and visitors each member lists his point-making activities.

Semester scholarship averages in all subjects are recorded here. A member receiving an "A" receives 50 points. Those with a "B" average get 30 points, and 10 points if they get a "C" average. Green Hand Degree recipients receive 10 points, Chapter Farmers get 20 points, and State Farmers can record 30 points. And in addition, each enterprise unit in the student's farming program entitles him to another 10 points.

Students earn other points for helping with the chapter's various work projects, including the concession stand for football and basketball games and helping with floats, booths, and entries at fairs.

Other areas such as participating in public speaking are also counted toward the point total. Ten points are given to class winners, 20 points to the chapter winner, and 50 points to a state public speaking winner. In fact, all award contests rate points for students.

Dan Isler, one of last year's winners, received a great many self-improvement points from attendance at local and district FFA meetings. And as an additional incentive, he was awarded 30 more points for having the highest yearly attendance at regular chapter meetings.

There can be no end to the areas where Future Farmers can earn self-improvement points, the chapter leadership committee reports. It is this group that sets up the point system each year to be voted into effect by the chapter at a regular meeting. So far, Roswell Future Farmers have kept the system working for seven years, and foresee an even brighter future for their contest encouraging self-improvement. ◆◆◆

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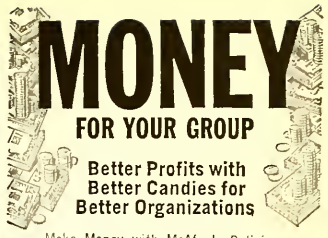

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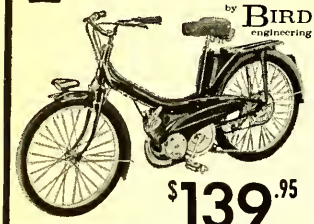

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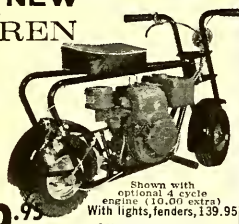

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Sportrait

Wide World Photo

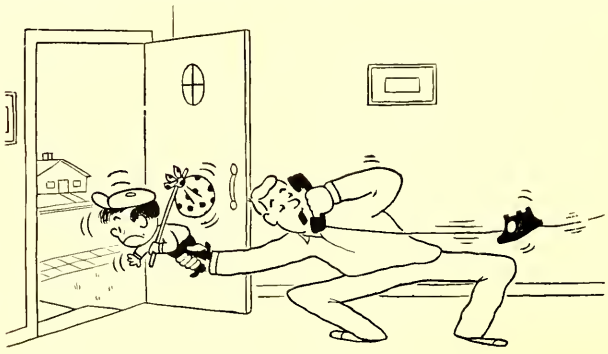
After 27 years of baseball, Stan Musial will end his career this season.

By Stan Allen

ST. LOUIS' Busch Stadium will be the scene of a most memorable event in baseball history on September 29. Stan "The Man" Musial has announced that this will be his last game. He will hang up his gloves and spikes to close out an amazing career that has spanned 27 years of professional baseball, almost as long as most men spend in less strenuous occupations.

Stan Musial, a native of Donora, Pennsylvania, signed his first major league contract in 1936 when he was only 16 years old. He signed as a pitcher but switched to the outfield after injuring his shoulder in a minor league game. That was a big break for "The Man," as his bat has boomed his way to stardom. From 1939 through 1958 —21 years—his batting average was over the .310 mark.

The Cardinals brought Musial up to the major leagues in 1941 after a fine five-year career in the minors. He appeared in only 12 games in '41 but hit for a .426 batting average. He won his first batting crown in 1943, his second full season, with a .357 average which led both leagues. That was the first of seven batting championships, which is second only to the eight won by Honus Wagner. His best season was 1947 when he hit at a .376 clip with 39 homers. He had 230 hits that year and drove in 131 runs. He set another National League mark that year, getting five hits in four games.



"Now what's this about a plate glass window?"

The experts wanted to write a finish to his career back in 1959 when his average dropped to .255. Stan took the challenge and brought his average back to .275 in '60 and up to .288 in 1961. He fooled them all when he came back last year to almost win his eighth batting crown. The 42-year-old veteran hit for a fine .330 batting average in 1962, good for third place honors in the league. He hit 19 homers, had 82 runs batted in, and even stole three bases.

Going into the last month of his career, he has appeared in almost 3,000 ball games. He has been to bat 10,904 times during his career, and that does not include the times when he has been walked, sacrificed, or hit by a pitch. He has banged out 3,610 hits which broke Honus Wagner's 40-year-old league record for hits. His 1,940 runs scored is another National League record as well as the other facts mentioned above. He has clouted 772 homers, which ranks him near the top of the all-time list in that department. In 1954, in a twin bill against the then New York Giants, Musial hit five home runs to set another of his many major league records. Then only last year, he hit three homers in one game against the New York Mets. He has driven in 1,939 runs in his lifetime, which tops the leagues. It would take a book to include all of his individual records, as everytime he comes to bat now a record is about to be set or broken.

Although Stan Musial has been one of the game's greatest hitters, he has been a good player and a great competitor. He is one of the "iron men" of baseball—he once played in 895 consecutive games to set another league record. The esteem shown him by other players is backed up by the 23 All-Star games that he has been voted to play in during his career. No other player is close to that record. He has been to bat 62 times in All-Star play and hit safely 20 times for 40 total bases and 6 homers. These marks are all All-Star records.

Stan has appeared in four World Series with the Cardinals, appearing in 23 games. He has 22 hits in 86 times at bat for a .256 average. He wants to appear in one more World Series, and the way the Cardinals are playing now, he just might have that wish granted.

The fans will surely miss seeing that famous corkscrew swing by old No. 6, and probably they will not see a No. 6 again. Mr. Gussie Busch, president of the Cardinals, said that no other player would wear No. 6 again. The last of baseball's honors, and the biggest, will soon belong to Stan "The Man"—his election to the Baseball Hall of Fame.

◆◆◆

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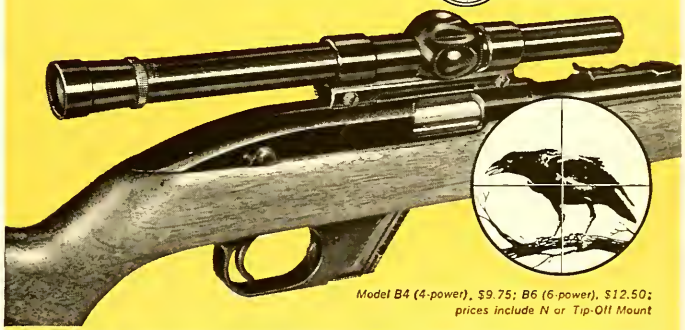

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The First One Doesn't Have A Chance!

During World War II, a buck private and a sergeant were court-martialed for striking a colonel.

Asked why he had done it, the sergeant explained that the colonel, while passing down the line of review, had stepped on his sore foot. *"Instinctively,"* said the sergeant, *"I threw up my guard, as anyone would do, and let him have it before I realized what had actually happened. It was an accident, I can assure you."*

When asked for his explanation, the buck private replied, *"Well, you see, sir, when I saw the sergeant strike the colonel, I thought the war was over."*

Larry Engberg
Whitetail, Montana

A couple of beatniks were watching a jet plane streak across the sky. As they watched, the plane caught fire and the pilot used his rejection seat to get clear.

"Wowsville!" yelled one. *"Dig that crazy toaster!"*

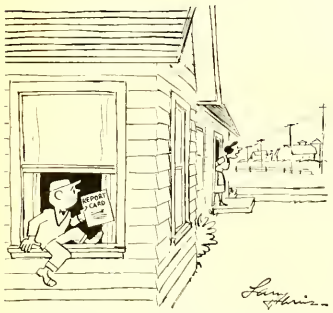
Dorothy Teigen
Ronan, Montana

You can always tell a man's nationality by introducing him to a beautiful girl. An Englishman shakes the girl's hand, a Frenchman kisses her hand, an American asks for a date, and a Russian wires Moscow for instructions.

Maurice Tice, Jr.
Derby Line, Vermont

At first I bet you thought this was a joke, but by now you have guessed it is not. Still you keep on reading. Isn't it funny how people who know they are being fooled will read this to the end?

Larry Hays
Clinton, Oklahoma



"That's strange! I thought sure I heard the school bus stop out front."

Charlie, the Green Hand

"Dad says I can use the car Saturday night but only if I use the tractor Saturday morning and afternoon."

A stranger approached a farmer, produced his card, and remarked, *"I am a Government inspector, and I am entitled to inspect your farm."*

Moments later the farmer heard yells from behind the barn. The inspector was being chased by a bull. Leaning over the fence as the madly running inspector drew near, the farmer cried, *"Show him your card, Mister! Show him your card!"*

Lillian Herman
Bay City, Texas

A farmer on his first visit to Chicago stopped at a soda fountain and ordered a pop. When it was served, he asked, *"How much pop do you sell in a week?"*

"Oh, about 40 gallons," replied the tender.

"I'll tell you how to sell 80," declared the farmer. *"Simply fill up the glasses."*

Marshall Plumer
Nebraska City, Nebraska

Small boy handing his mother the phone: *"It's Mrs. Baker—with the 6:30 news."*

Doris Jean Jeffers
Oneida, Tennessee

A mother received her first letter from a small son away at camp: *"Dear Mom, You forgot to sew my name on my underwear, and all my friends are calling me 'Fruit of the Loom.'"*

Janice Reinhard
Canal Winchester, Ohio

Little boy to elderly man: *"Do you know how to top a car?"*

Elderly man: *"No, how?"*

Little boy: *"Tep on the brake, tupid!"*

Eileen Fischer
Emerado, North Dakota

Jack: *"Tom was kicked out of school for cheating."*

Terry: *"How come?"*

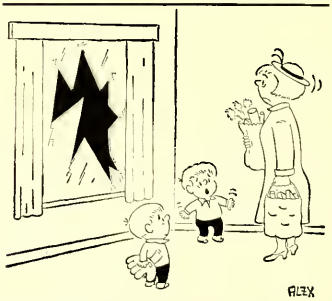
Jack: *"He was caught counting his ribs in the biology exam."*

Freddie Fetrow
Dover, Pennsylvania

Salesman to clerk in small town hotel: *"Any big men ever born in this town?"*

Clerk: *"Best we can do is babies. Is it different in the big city?"*

Ernest Miller
Lansing, Michigan



"I tell you they've just got to do something about those sonic booms!"

The National FUTURE FARMER *will pay $1 for each joke published on this page. Jokes must be submitted on post cards addressed to The National* FUTURE FARMER, *Alexandria, Virginia, 22306. In case of duplication, payment will be made for the first one received. Contributions cannot be acknowledged or returned.*

SUCCESS IS FINDING OUT WHAT GOD WANTS YOU TO DO AND DOING IT

You cannot say, "Because Bob Jones University is doing one of the most unique jobs in education today, it is, therefore, a successful institution." Nor do the numerous reasons which justify Bob Jones University's being called the *"World's Most Unusual University"* measure its success. These are but outward manifestations of its success.

Bob Jones University is successful because it is doing the job God has called it to do—providing a general education in the essentials of culture and in the arts and sciences; giving special emphasis to the authority and ethics of the Holy Scriptures; combatting all atheistic, agnostic, pagan, and so-called scientific adulterations of the Gospel.

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